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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and to improve the character of the service rendered to the public.

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HYDROGRAPHIC OFFICE WORK.

There is always the possibility of one government department intruding by assuming the prerogatives and duties of another branch, and, as if the Coast and Geodetic Survey service had not sufficiently robbed the Navy of the credit due its officers, a couple more departments are now stepping in.

It is learned that in order to test the direction of the currents that flow from the polar regions, Captain Shoemaker, Chief of the Revenue Cutter Service, has made arrangements to place a number of specially prepared casks, designed by Rear Admiral Melville, Engineer-in-Chief of the Navy, on ice floes in Behring Sea. There are fifty of these casks, each 28 inches long and 16 inches in diameter, painted black, so as to be seen easily, and pointed at each end. Inside each are directions in half a dozen languages to be followed by anybody who finds a cask. He is asked to write to the nearest United States consul, giving the latitude and longitude, when the cask was found, the date and the number of the cask. He is also asked to plug up the cask again and turn it adrift.

The Hydrographic Office is now in the Bureau of Equipment, but it is nevertheless in the Navy Department.

There is no mechanical or scientific engineering skill to be exploited in the construction of these casks, nor is there any revenue to be defrauded if the contents falls into native or foreign hands. Hitherto the Hydrographic Office has exercised exclusive interest in determining the set and drift of Atlantic as well as Pacific currents. Why, then, should the Engineer-in-Chief embroil the Revenue Cutter Service in his imaginative innovations? Triple screws, superposed turrets, water tube boilers, submarine boats, and other fads are more distinctly within his province.

THE ATLANTIC RECORD.

The Deutschland arrived in New York last Thursday with more laurels to her collection. This last passage to the westward she made the greatest daily run from noon of July 29th to noon of the 30th a distance of 601 knots. She also increased the mean hourly speed westward to 23.07 knots. This run was made over a distance of 3,141 miles. The Deutschland left Cherbourg Mole at 6.59 o'clock in the evening of July 26 (Greenwich time) and passed Sandy Hook light-ship August 1, at 6.11 (11 hours 11 minutes a. m. Greenwich time), making the total distance in 5 days 16 hours and 12 minutes. Her daily runs were;—406, 576, 556, 601, 570 and 432.

The daily run of 601 knots shows an hourly speed of a fraction over 25 knots or upwards of 28 statute miles. The best eastward record shows a mean of 23.51 knots during the passage of 3,082 miles.

Considering the report that the Cunards have it in contemplation to build a 25-knot steamer to win back the North Atlantic championship for the British flag, a 25-knotter may not be able to do the work. The British would do well to revise their plans again, so that the United States may know just how to figure, to go, say, two or three knots an hour better than they can beat their German competitor.

THE FIRST CUP WINNER.

America, the famous schooner that 50 years ago went to England and in a race around the Isle of Wight against 15 of the British cracks, bore away the Queen's cup, is still a fine and seaworthy craft. She is the property of Paul Butler, a nephew of Gen. Ben Butler. She will celebrate her 50th anniversary by being present next September when the Constitution and Shamrock II., off Sandy Hook, renew the struggle for the speediest yacht supremacy which she instituted.

But America, since winning the Queen's cup, which was afterward renamed in her honor, has not floated in seclusion. Some time after winning the trophy she was rechristened the Camilla, and won several races under her new name. In 1861 she turned up as the Memphis at Savannah in the service of the confederates, and to escape capture by the United States frigate Wabash she was scuttled and sunk in St. John's river, Florida.

After the war she was raised by the government and used as a practice boat by the naval cadets at Annapolis. In 1870, when James Ashbury challenged for the cup, the government fitted her out at the Brooklyn navy yard at an expense of \$25,000, and although 20 years old, she beat the challenger, the Cambria. Franklin Osgood's Magic, however, was first home out of a fleet of 24 vessels. America was fourth. Ben Butler bought her from the government for \$5,000, and took her to Boston, where she has again been placed in sailing trim.

ADDITIONS TO A SHIPBUILDING PLANT.

The Collingwood Shipbuilding and Dry Dock Co., Collingwood, Ont., have booked some large and important orders well ahead, and contemplate adding to their plant by enlarging the dry dock to 530 feet length and 75 feet width, and to a depth of 16 feet of water over the sill. To do this work they will add to the outer gate of the dry dock by cofferdam on the flat rock bottom, and inside of this extension will build stone walls, as is now being done with the present dry dock. A new set of gates will be placed inside the basin, the working power being supplied by two large steel boilers allowed a pressure of 170 pounds per square inch. The dock when finished will have stone walls and rock bottom the whole length. This work being done during the winter, without disturbing the original dock. The company has just completed a new pumping well, in the solid rock, and intend to put in new pumping machinery. The limestone formation at Collingwood is favorable for such work and the quarries furnish stone cheaper in the end than if timber was used.

There will also be added an engine shop, foundry and boiler shop, so that marine engines and boilers of the largest kind can be built in the yard, thus providing in all respects a modern shipbuilding and engineering plant, with the best provision for new work of the largest size and all probable repairs.

CONCRETE FOUNDATION FOR LIGHT-HOUSE.

An interesting piece of concrete work is being carried on by the United States government in preparing the foundation for a new light-house in the harbor of Norwalk, Conn. The light-house when completed will stand upon a cylindrical block of concrete 33 feet in diameter and 25 feet 9 inches high. Except for a cistern 10 feet in diameter and about 5 feet deep, this foundation is of solid concrete. The concrete was deposited inside a segmental cast iron cylinder or shell, composed of 192 plates arranged in courses of 32 plates each, adjacent courses breaking joints. The plates are 1 to 1 1/4 inches thick, ribbed and flanged, and jointed with 1 1/4-inch bolts. The concrete filling is composed of one part of first quality American Portland cement, two parts sand, three parts gravel and four parts broken stone, mixed dry. The specifications permitted the use of large stones of from 100 to 1,000 pounds weight, in the concrete, provided that no large stone be placed nearer than 12 inches to the inside of the cylinder, to the air shaft, to the bottom of the cistern, or to each other. The walls forming the cistern, the linings of the foundation cylinder and dwelling house, and also those separating the different compartments in the cellar, are constructed of brick laid in cement mortar. After the structure has been completed and all false work removed, 1,500 tons of rip rap are to be placed around the foundation within a distance of 25 feet from it. The stone is to be of sizes up to 1,500 pounds in weight in the proper proportion to pack closely. The first concrete placed within the cylinder was mixed dry, placed in bags and lowered to the bottom. After a sufficient quantity had been lowered in this manner to hold the cylinder against the action of tides the rest of the concrete was lowered to place in buckets.

ONTARIO'S UNDEVELOPED RESOURCES.

Mr. F. H. Clergue, in speaking of the undeveloped resources of New Ontario in conversation lately with a representative of an Ottawa paper, said:

I firmly believe that Canada will be a great country, and that before many years. Canada is full from end to end of natural wealth. The fact is only becoming known to the world. What will happen is this: Very soon the opportunities of Americans for profitable home investment will come to an end. A general turn of eyes toward Canada will take place. Capital will flow in and the capital will be followed by population. Just as Canadians went to the United States years ago to better themselves, so Americans will come to Canada. American capital will be followed by British capital and more or less British immigration. Once the country gets a start the rest will be easy. Mr. Clergue went on to say that Canadians have been accused of being "slow," but in his opinion it was not true. Canadians were just as alive to opportunities as Americans. The trouble has been that Canadians had lacked capital. Canadians, Mr. Clergue believed, had the making of a magnificent nation; physique, hardiness, cleanliness of tone, energy, all the desirable qualities were there. When Canada becomes a nation, he said, it will be a great nation. A year ago, the population of the Canadian Soo was 4,000. It is now 7,000. Mr. Clergue says he expects it will be 50,000 within three years. It will be a great manufacturing centre. When in full operation the steel plant alone will employ over 10,000 men, and why, he asks, shouldn't it be a great centre? Within easy distance there are in sight vast quantities of iron, nickel, copper and pulpwood. The water power is unlimited. Lake Superior is our mill pond, and the St. Mary's river our flume. Our shipping facilities, both by rail and water, are unsurpassed anywhere.



DULUTH-SUPERIOR.

Special Correspondence to the Marine Record.

The two Scotch type boilers have been recovered from the wreck of the Henry Chisholm.

Work enough is already assured to make a brisk winter at the West Superior yards of the American Ship Building Co.

The new steamer building at Superior for Milwaukee owners will be ready for launching in about six weeks. No material is yet being received at the yards for the new contracts for two boats for next season's delivery.

Benjamin Altman, whose wife, mother-in-law, and two daughters were drowned through the burning of the steamer Bon Voyage, has retained counsel and will file a declaration against the White Star Co., owners of the steamer, for damages.

The steamer Stimson and barge Bissell have been fined \$1,000 each for going to Port Arthur and failing to report their arrival within twenty-four hours after returning as prescribed by the government regulations when vessels arrive from a Canadian port.

Shipments of lumber last month from Duluth, Superior and Two Harbors reached the immense total of 70,000,000 feet the largest month's lumber business in the history of the trade. The total is nearly as large as two ordinary month's business.

Several sales of lumber each of five million feet and upwards have been made within the past few days. Timber lands, owned by the Cook & Turrish interests also changed hands for very large amounts. The property is in St. Louis and Lake counties.

The Evening Telegram, Superior, reports the stranding of the Western Liner, Boston, at the head of Harsen's Island, Detroit river, under the caption "Boston Strikes Earth." This charming way of putting it leaves the reader to surmise that it might have been vice versa.

Steamboat Island, one of the Apostle group, off Chequamegon Bay, Lake Superior, has disappeared. Before the last storm and from time immemorial it was a small island of sand and rock overgrown with trees. Now it has gone and a rocky reef several feet under water marks its place.

Capt. John V. Tuttle, of Cleveland, and Joseph Kidd, of Duluth, have made a survey of the steamer Preston and the vessel has been taken out of dry dock at Superior to await the decision of the insurance companies and the owners, regarding repairs. It is said that the boat carried \$20,000 insurance.

The steamer Geo. Burnham, Capt. Schwerman, arrived here with a cargo of maple for the Northwestern Fuel Co.'s new dock at Superior. It was thought strange to see a lumber cargo headed for Duluth and Schwerman was asked on the way up if he wasn't steering by a Chinese compass, with reversed points.

Two well-known lumber brokers at Duluth, Davis & Comstock, have incorporated the Valley Coal Co., at Valley, Wash., to develop the seven-foot vein of coal discovered there. The company is organized with J. W. Comstock, Duluth, Minn., president, and W. G. Davis, treasurer and general manager.

The lumber sales at Ashland last week ran up to 17,000,000 feet. Cleveland parties took about 2,000,000 feet and a few days earlier the Nicola Bros. Lumber Co., Cleveland, purchased 3,000,000 feet of Norway and white pine. Buyers from Chicago and lower lake points are found daily at points along the head of the lakes.

Superior has kept up her lumber shipments by forwarding upwards of 13,000,000 again in July and increased receipts of bituminous coal from 140,000 in June to 223,000 tons for July, anthracite 30,000 tons. June ore shipments amounted to 230,000, July 320,385. Imports and exports 872,197 nearly equally divided. The receipt of 12½ million feet of logs is noteworthy for the month.

The Duluth Steamship Co. of which G. A. Tomlinson is the head, was incorporated at St. Paul with a capital of

\$120,000. The incorporators are G. A. Tomlinson, Laura D. Tomlinson and H. R. Spencer of Duluth. The company is organized to contract for the construction of a 5,000-ton steamer by the American Ship Building Co. and which will likely be built at the branch yards in Superior, Wis.

The total shipment of iron ore from the head of the lakes, Duluth, Two Harbors and Superior, for the present season to August 1, was 4,687,118 tons, as compared with about 4,856,666 gross tons for the same period in 1900, indicating a shortage to date of almost 170,000 tons. The docks are rapidly making up the big shortage that faced them at the end of the first and second months, and it will probably be wiped out by September 1.

The C. Reiss Coal Co., Ashland, will very soon have its dock there completed. The electric light plant has been installed and the new hoisting machinery is being put in position. With the new appliances no men will be used in the hold of a boat to shovel coal until the buckets have got "skin" when shovellers will be utilized to clean up what remains. The buckets will be clam shells and will work automatically, loading and discharging coal without any assistance save that which is effected by the use of machinery in the derrick house above.

The first time in the history of iron ore handling a single dock system has touched the 1,000,000 gross ton mark in the amount of ore forwarded in a month. During the month of July, the Duluth & Iron Range docks, at Two Harbors forwarded 1,005,614 tons. This has never been equalled in the history of ore shipping anywhere in the world, although the shipping season for various causes was about one month late. Two Harbors' docks have forwarded to August a total of 2,205,847 gross tons, as compared with 1,997,489 gross tons to the same date last season, showing an increase of 208,359 tons.

BUFFALO.

Special Correspondence to The Marine Record.

The 50 cent Lake Michigan freight rate on coal is now the going figure.

Some of the line boats had only 1¼ cents on corn this week from Chicago. Wheat ½ cent better.

Commander Andrew Dunlap, U. S. N., light house inspector for this district, has returned to Buffalo, having completed an inspection of the light houses on Lake Erie and the Detroit River. His next tour will be to Lake Ontario.

The gates of the Cornwall canal, St. Lawrence system, were carried away last week while a loaded steamer was locking through. Traffic was suspended until early this week when repairs were completed.

While the labor trouble regarding the Anchor Line boats seems to be settled, the Rutland Line is more mixed than ever. The effects of the strike is being keenly felt among the 800 longshoremen at Ogdensburg.

Shoal water is giving the port a hard name again. The Grampian towed down the Blackwell drawing only 14 feet and dragging through the mud at that. The Nyanza after loading coal at the Lackawanna trestle found herself imbedded in a soft bottom and had to call on tugs to float her and so the story goes with every likelihood of a continuation on account of the lack of dredging.

One reason for the lack of soft coal shipments is found in the rail rate. Ohio coal reaches the lake by rail for 73 cents, while Buffalo pays \$1.00 from the nearest mine. The bulk of last weeks shipments 61,000 tons went to Duluth-Superior 27,000 tons, and Chicago-Milwaukee 10,000 tons each, freight 35 cents to former and 40 to 50 cents to latter named ports. Racine paid 50 cents on a small cargo and that is now the going rate to Lake Michigan.

There is much to be said in favor of Buffalo getting the new shipyard and drydock. It is not always convenient to change ports for drydocking and large repairs and these facilities are wanted where the vessels are, not miles away. Capt. Davidson leans rather to Ashtabula and likes to visit there. Conneaut and Fairport are becoming immense ore receiving points, Cleveland is also adjacent, but Buffalo is the spot direct.

An action has been brought by Hyman Speyer to recover \$3,000 damages, which he alleges he sustained on the Montegale. Speyer was a deckhand on board the Montegale. It was his first employment on board ship. He alleges that on the night of July 15 he fell down a hatchway and sustained an injury to his arm, which will cause it to be stiff for life; that it incapacitates him from any form of manual labor, and that the owner's agents were negligent in not having either a lantern at the hatchway or a covering on it.

DETROIT.

Special Correspondence to the Marine Record.

Water gauges showing depth at the Limekiln crossing are exhibited at the Pittsburg and Smith's fueling docks.

The railroad car-ferry Sault Ste. Marie stranded several days ago on Graham's shoal, was floated by the wrecking tug Favorite.

The rooms formerly occupied by the Shipmasters' Association, Woodward avenue, are required by the officers of the United Railway Co., so that the Masters will have to look up other quarters.

Shortly after leaving here on Tuesday, an explosion took place on board of the Northwest and two men were found seriously injured on account of a tube blowing out of the Belleville water tube boilers.

More boat race talk is being indulged in by the White Star and Arnold line managers. A race between the Tashmoo and the Chippewa from Algonac to Port Huron may result. Tashmoo backers are plentiful.

A file carelessly left in one of the new steamer Iroquois' engine cylinders is what disabled her at the mouth of Detroit river last week. The file had damaged the lower part of the cylinder. Repairs were made at the works of S. F. Hodge & Co.

The steel steamer Colonel has been assigned official numbers this week by the Bureau of Navigation, Treasury Department. Her tonnage is 3,879 gross and 3,044 net. She was built at the Wyandotte yards of the Detroit Ship Building Co., and hails from Detroit.

According to the annual report of the Detroit Custom House, thirty vessels of 44,484 gross tons, have changed from the district to other places of enrollment during the past year. This is largely accounted for by the sale of the Whitney fleet and several of the Parker vessels. The number of vessels enrolled in the district at present is 250.

It is stated that the Northern Michigan Railroad Co. will commence building within the next four months a road from Sault Ste. Marie to the Straits, and that an order for an ice-crusher to run between Mackinaw and St. Ignace has been or shortly will be placed, which will connect with the Grand Rapids & Indiana at Mackinaw City, now under the control of the Pennsylvania Co.

Chicago yachtsmen were simply compelled to wilt and admit that the Detroit yacht Cadillac was "it." The championship of the lakes, as also the possession of Canada's cup will be contested for between the Cadillac and Invader. The best of good hopes goes with the Cadillac and may she win, at the same time, the fairest kind of a fair show must be given our Canadian cousins and visitors.

The life-saving crew at Harbor Beach on Friday last picked up the body of a man off that port. The man was apparently about fifty-five or sixty years of age, five feet six inches in height and would weigh about 150 pounds. He had a gray, stubby mustache and was bald. The body was clothed in dark overalls and vest, dark cotton shirt and white underwear, and had no shoes on. It was badly decomposed and had probably been in the water for some time. There were no papers by which it could be identified.

Since the opening of navigation Saginaw has received nearly 35,000,000 feet of lumber, including 14,000,000 feet in July. Shipments were 3,500,000 feet for the season not a foot of which was shipped ex lake, something which has not occurred for forty years before. Twenty years ago, or in 1882, the shipments from Saginaw up to August 1 amounted to 400,000,000 feet. The July receipts at Bay city aggregated 11,000,000 feet of lumber and 6,000,000 feet of sawn timber, also 10,000,000 railroad ties and cedar posts.

The International Longshoremen's Association has just had printed the proceedings of the tenth annual convention, held in Toledo, July 8th to 13th, inclusive. The annual is in book form, 9 by 6 inches, and containing 166 pages. Forty thousand copies of the association's constitution will be printed in English, 25,000 in German and Polish, 20,000 in Finnish, and 10,000 in Italian and Portuguese. These will be sent to ports in different parts of the world, so the freight handlers can learn the purposes, etc., of the longshoremen's organization.

In some interesting reminiscences of his visit to Japan with Commodore Perry's famous expedition, chief engineer Edward D. Robie, U. S. N., now retired, tells in the Detroit "Free Press" of the influence of a steam whistle on the ignorant Japs. Having no chart of the bay, Perry was obliged to send out small boats to make soundings. The

Japs attempted to stop this proceeding, but when the steam whistle on the Mississippi was blown, the like of which they had never before heard, they paddled for shore, and thereafter remained at a respectful distance. Mr. Robie says he had the honor of taking the first daguerreotype ever made in Japan, there being no photographs at that time. It was a picture of Commodore Perry, in full uniform, standing in a Buddhist temple, and when he saw it the commodore remarked: "I believe you engineers can do anything." Mr. Robie has been spending some time with his son, H. A. Robie and family at 854 Cass avenue.

CLEVELAND.

Special Correspondence to The Marine Record.

Ashtabula had 29 ore cargoes in port on Monday last; this meant about 100,000 tons.

Mr. J. H. Wedow, of the firm of Mitchell & Co., is again at his desk after enjoying a lake cruise for several days with his family.

Capt. J. A. Moore has been appointed master of the schooner Verona of the Gilchrist fleet. The Verona recently returned from the coast.

There was some demur this week at taking 40 cents on coal to Lake Michigan, but enough tonnage was placed to hold the rate. A 5-cent advance is looked for.

The cruising yacht Maryette, built for the late Capt. Jno. W. Moore and Judge Liberty H. Ware, is now for sale. Besides being fitted with canvas, she has a gasoline engine and very complete equipment. The executor of the estate will consider any fair offer.

Hon. T. E. Burton, Chairman of the River and Harbor Committee, has returned home after making a 14,000-mile tour inspecting rivers and harbors on the Atlantic and Pacific coasts. It is safe to say that Mr. Burton has now a wider individual knowledge of rivers and harbors than any other person in the country.

July ore receipts at Lake Erie ports show more than half a million tons over that of last year. The total decrease up to August 1 is 793,000 tons, last season's record showing 9,454,400 tons. With the same brisk shipments during August, last year's figures will have been duplicated, and this, too, in the face of a late opening, through ice, strikes, etc.

These are the days when the local inspectors of steamboats stationed at this port get work thrown at them in solid chunks. There are times when inspections are too frequent for the staff employed and it would be only right if a temporary transfer system could be arranged so that crowded districts could have immediate assistance during the rush of work. I noted one of the inspectors looking quite worn out this week, but his work continues.

Nearly 1,000,000 tons of ore and coal were handled at Ashtabula during July, eclipsing all monthly records since Ashtabula became a port. The ore receipts were 701,119 tons, 18,900 tons of which was shipped from the Lake Superior port, Michipicoten. This is 66,241 tons more than received in July last year, and exceeding the June receipts by 44,684 tons. Coal shipments were 234,813 tons. There were 267 arrivals and 276 clearances in July. Conneaut gets to the front with a July record of 613,170 tons of ore, or nearly double the quantity received in July last year.

My correspondence in the issue of July 25 contained the following paragraph: "It is now up to the Solicitor-General of Ohio to refuse accepting any taxes from the fishermen since he can offer or provide no protection to the industry. The fishermen say it is just as criminal to steal fish out of the mains as it is to take fish out of their nets. An Ohio J. P. says not." This was in connection with the decision recently rendered at Painesville, wherein the Justice held that anyone was at liberty to take fish out of nets. A protest was moved against such a ruling by the fishermen and it was suggested that they pay no taxes for license to fish until they had some sort of protection for their industry, etc. The above item being brought to the attention of J. M. Sheets, Esq., Attorney-General, Columbus, he replied: "In the first place there is no such officer in the State of Ohio as Solicitor-General, and if you meant that paragraph for the Attorney-General I wish to inform you that the Attorney-General has nothing more to do with the collection of taxes from fishermen than he has with managing the falls of Niagara. I have no doubt you will do me the justice to correct the error." My verbal protestor of a couple of weeks ago will thus far see how the matter stands.

CHICAGO.

Special Correspondence to The Marine Record.

The steamer Northwestern, the first of the new line to cross the Atlantic, cleared on her second trip last Thursday.

The steamer Manitou, may go on the Chicago-Buffalo run for several trips, after her regular season is ended. The Northern Line has had such an excellent patronage all summer that there is probably room for one more on the Buffalo route.

The Chicago Transportation Co., with \$2,250,000 capital has been organized here to build and operate ten steel steamers for the lake grain trade. Charles Counselman, of this city, and E. S. Wilkinson, of Syracuse, N. Y., are the organizers of the company.

The Petoskey and Frank Woods were each trying to get in the creek first on Monday and now Capt. J. M. Mitchell makes complaint against the Woods for colliding with his craft. The local inspectors are asked to cast oil on the waters of discord between the masters and pilots.

It is said here that if the Buffalo grain shovellers are determined to make trouble on a slight pretext, it can't be known any too soon. So far as Chicago is concerned not a bushel need be sent forward ex lake and there is practically nothing from Duluth. The Georgian Bay outlet is all that is wanted.

All the dry lumber has been shipped from Marinette, Wis. Large shipments have been made to Buffalo, 10,000,000 feet of hemlock was shipped from Cedar River last week. There is still some hardwood for sale, but no pine except culls and scoots. Buffalo, Pittsburg and Milwaukee buyers visited Marinette during the last few days.

Shipments of corn out of Chicago by lake in July of this year aggregated 2,554,000 bushels, as compared with shipments of 13,521,000 bushels in July of last year. Many of the boats that have been grain traders from this port in other years have been carrying ore to Lake Erie ports since navigation opened. Wheat to Georgian Bay is placed at 1 3/8 cent, equal to the offer for Buffalo.

The passenger steamer Northwest arrived here twelve hours late and reported trouble with her boilers whereby two men were injured. An explosion took place after leaving Detroit, caused by the blowing out of one of the tubes in a Belleville water tube boiler. The engine room was filled with escaping steam. All but two, however, of the crew succeeded in getting out of the way without injury.

A new catalogue of corrugated furnace boilers with the Morison suspension furnace for marine and stationary use has just been issued by Joseph T. Ryerson & Son, Chicago. This corrugated furnace boiler has a very wide field of usefulness, as is shown by the catalogue, which gives in addition to the brief description of the principal features of these boilers some extensive lists of places where they are in use, and what people think of them.

The wages of the four deserters from the Northwestern at Liverpool amounted in round figures to \$200. This sum was paid over to the Collector of Customs to be covered in to the Marine Hospital fund as usual. Capt. Atkinson can be held in the sum of the value of the effects of the deserters if it is proved that he was privy to their removal, as deserters forfeit wages and effects, and such must be duly accounted for by sworn statement, etc., but then a Custom House oath don't amount to anything anyway.

Options on all dredging properties on the lakes have been renewed to January 1, for the purpose of combining them in the proposed \$10,000,000 trust. Previous options expired August 1, and there was said to have been some question of the deal being consummated. James A. Smith, of the firm L. P. & J. A. Smith, Cleveland, is the representative of those who are promoting the combine, and it is said that he is getting affairs in shape to bring all the principal firms under one head before the close of the year.

The government transport Terry has been purchased by Capt Miles E. Barry at New York and will leave that port for Chicago, Aug. 15. The Terry was built in 1892 at Philadelphia. She is 220 feet long by 40 feet beam and 13 feet depth of hold. Her tonnage is 1,338. The Terry was formerly known as the Hartford and ran in a line on the Atlantic coast until she was purchased by the government for an army transport. The price paid by the government was \$170,000. The Hartford will be placed on the route between Chicago and Muskegon, taking the place of the State of Michigan. Barry paid less than \$20,000 for her and will change her name.

The steamer Northwestern, all ready for the trip across the Atlantic, was held in port last week by the lack of engi-

neers. The assistant engineers quit because they claimed the chief engineer was not a member of the lake engineers' union. The objectionable man insisted that he belonged to the engineers' union on the Atlantic, but this did not suit the lake men. Pickets were stationed thickly around the Northwestern and then the chief engineer quit. General manager Purdy, appealed to the Government authorities to find if they could do anything to help him out. All the engineers shipped regularly for the trip to Europe. However, a new engine room staff was got together and the vessel sailed on Thursday.

The excursion steamer Robert E. Burke, owned by Capt. Peter Barry, has been fined \$500 by Collector of Customs Nixon for a violation of the statutes regarding steamboat inspection. The Burke was inspected by the local board of steamboat inspectors at Milwaukee, together with the other steamers of the Barry fleet, and the license issued allowed her to navigate Lake Michigan for a distance of four miles north and south of Chicago and two miles in the lake. The steamer was sent to Waukegan from Chicago with an excursion without securing the necessary permission from the local inspectors, and the fine was the result. Capt. Barry will probably appeal to the secretary of the treasury, to have the fine remitted or at least reduced.

On Saturday next, August 10, the first of the races for the Canada cup between the Detroit owned yacht Cadillac, the representative of the Chicago Yacht Club, as defender, and Invader, the representative of the Royal Canadian Yacht Club, of Toronto, as challenger, will begin over the course of the Chicago Yacht Club. Public attention has been more drawn to yachting by this series of contests than by any previous meetings of sailing craft on the lakes and it is generally believed that the two competitors are the best specimens of the boat builder's art ever floated on Lake Michigan. Five races are to be sailed in all while there is much division of sentiment as to the probable outcome of the race. Local yachtsmen incline to look forward to a victory for Cadillac with some confidence, the Canadian visitors are also expectant, and there are not a few who look favorably upon the chances of the challenger.

LETTERS AT DETROIT MARINE POST OFFICE

To get any of these letters, addressees or their authorized agents will apply at the general delivery window or write to the postmaster at Detroit, calling for "advertised" matter, giving the date of this list and paying one cent.

Advertised matter is previously held one week awaiting delivery. It is held two weeks before it goes to the Dead Letter Office at Washington, D. C.

Allen, Geo. A.	Kinyoun, Mrs. J. J.
Anderson, Oscar, Penobscot	Lagault, Thos., Rugee
Ashly, Charley	Lundy, E. Urban
Ames, Cornelius B.	Mullett, Geo., Falcon
Benson, W. C., Penobscot	Malloy, Jno. J.
Benard, Jno., Rugee	Murray, Thomas, Denver
Brown, Robt.	Merumir, C. H.
Bacon, John	Maxwell, Geo.
Bowen, Jno. E.	Madigan, Harry
Bowen, Frank	McCauley, Mary
Bropmer, Wm. J., Lozen	McBride, J. A.
Brown, Daniel D., Manola	McIntosh, Edgar, Shores
Borge, Frank, Niko	McCrae, R. Harry
Bedford, Jno.	Nicols, Lowell, Hanna
Beattie, Wm.	Nerretter, Geo.
Brown, C. A.	Nowachi, Peter
Chookey, Andrew, Iron Duke	Norcross, Wm.
Carroll, Maurice, Neosho	Patten, Claude, Williams
Cassin, Lawrence, Hennepin	Pangburn, Orin, Jno. Owen
Cantwell, James T.	Powers, Capt. W.
Cottrell, Jewell	Quigby, Thos. P.
Campbell, Geo.	Ross, Capt. Chas.
Connors, James, Livingston	Richardson, Jos., Kaliyuga
Carpenter, Vern, Senator	Raymond, Joe, 2
Davis, Thos. W., 2 Pathfinder	Ryberg, Carl H., Caledonia
Dille, P., Jno. Owen	Smith, Geo., Wilhelm
Donley, Edw. W.	Spragg, Jos.
Dill, Chas., Glidden	Surles, James
Dillon, Roy	Schultz, Wm. M., Flower
Dawson, Omar, Tyson	Stery, J. E., 3, I 29
Edwards, Perry H.	Schaller, Geo., 2 Caledonia
Ellsworth, Geo. S.	Shaffer, F. P., Falcon
Gray, W. R., 2 Seattle	Tournquist, Louis
Goff, Chas. H.	Thompson, Henry, Glidden
Gagnier, Jos., 2 Sacramento	Tenie, Fred., Kaliyuga
Gordon, Alex., Princeton	Whorrey, Cap. Jno., Sacramen-
Gatfield, Gillman, 2 Schuck	Webb, Mrs. J. E., 3 Vega
Harmon, Ernest, Niko	Worden, F. A., Penobscot
Heaney, Capt. Jno.	Watterman, Joe
Hope, J. H.	Wise, G. M.
Harrison, Woodie	Wright, Thomas, Hanna
Harland, Stanley	Wells, John, Paraguay
King, Graham N.	Woodford, W. H.

F. B. DICKERSON, Post Master.

THE OVERHEAD FERRY AT ROUEN.

(ILLUSTRATED).

The crossing of channels has always been a difficult problem to solve, especially when such channels are near the sea and are thereby subject to tides, tidal or ordinary waves, and currents, to which may be added, in northern latitudes, the possibilities and risks of frost.

The chief difficulty arises from the fact that it is necessary for channels in all weathers to retain a free passage, mast high and of great width, in order not to interfere with the rights of navigation.

Among the means which the engineer has hitherto had at his disposal for the purpose of crossing rivers or channels may be named: Boats, or ordinary ferries; swing, draw, and bascule bridges; ordinary bridges; tunnels under the bed of channels; traveling carriers.

Swing, draw, and bascule bridges are limited to relatively small openings. They can only be used over canals or sea channels which allow the water traffic to be temporarily interrupted and where a vessel can be under perfect control in all weathers, as the navigation is necessarily discontinued when the bridge is closed or lowered. These bridges cannot be used over channels near the open sea, from which a vessel some times comes in stress of weather, unable to moderate her speed and make the signals necessary for the working of movable bridges. In point of fact, swing, draw, and bascule bridges can be used only over docks or inland canals or rivers.

Ordinary bridges are more satisfactory for navigation than the preceding, but if they are to cross a river leading to an important harbor, they must be built of such a height that the tallest masted ship may sail underneath, and sometimes these masts reach a height of nearly 200 feet above the water. The approaches to the bridge also involve considerable works in order to reach such great heights, especially when, as is generally the case, the site of the bridge being near a town or masonry quays, a considerable area of land has to be purchased in order to provide space for constructing the approaches. It is, then, easy to understand why ordinary bridges crossing channels are so few—their first cost is too heavy. Some of those that exist, however, are remarkable, among which may be named the Forth Bridge in Scotland which is 151 feet above high water, and our own Brooklyn Bridge, at New York, with a height of only 135 feet, which nevertheless involved a cost of over \$15,000,000.

The system exemplified by the Transbordeur at Rouen, is called by the inventors the transshipping bridge (pont a transbordeur), and is due to the combined labor of Messrs. De Palacio and Arnodin, to whom M. Brull, a former president of the Society of Civil Engineers in France, lent his assistance for the verifications of the conditions of stability.

The advantages of the system are: As enumerated by the Vice Consul at Rouen as follows:

(1) The channel to be crossed is left entirely clear at all hours, without requiring vessels to make any special signals or modify their rate of speed any more than they would in the case of a cross channel ferry.

(2) No increase of distance or ascent or descent is forced on the traffic in order to cross from one shore to the other.

The essential part of the system may be described as a horizontal railway supported by a bridge spanning the channel and built up at such a height as will allow the tallest masted vessels frequenting the channel to pass beneath. Any kind of bridge may be used, provided the rectangular opening for navigation is left entirely clear; except that arched bridges, which would reduce that rectangular area, must be excluded. Suspension bridges, however, owing to the facility they offer for spanning wide channels, the great advantage they possess in permitting erection by "launching" without any scaffolding interfering with the navigation, the economy of their construction, the little area they offer to wind pressure, and, lastly, their lightness and elegance, seem to command preference in the majority of cases. This is the kind of bridge in Rouen.

The platform of the bridge carries two lines of rails, over which a carriage on small wheels rolls, the number of wheels varying with the weight to be carried.

The rollers are connected with a movable frame under the line of rails, which may freely move in a longitudinal direction quite close to the platform and from one end to the other of same. We have thus a rudimentary vehicle which can cross the channel without interfering in any way with the opening, which is to remain clear. In order to make this vehicle of practical use, iron rods or cables are attached to the frame, above mentioned, the object of these being to carry a platform, called by the French inventors transbordeur, or carrier from shore to shore, hanging at the same level as that of the quays on each bank, but in any case above high water and the reach of waves.

The frame can roll over the rails in both directions at pleasure; the suspended carrier can therefore land on one shore or the other at will, as it follows the frame in the same way as the car follows the balloon.

In order to obviate any swinging motion which might result from the pressure of the wind or the forward motion of the carrier itself, the rods by which the latter is suspended are arranged in triangles, both in the longitudinal and transversal directions. There is thus a little railway for crossing the river, with this difference, that the body of the

in fact, be at any moment necessary to reverse the direction on account of an unforeseen obstacle.

The accompanying cut shows the bridge with a platform part way up the piers. This can be reached by stairs or elevators, and used as a restaurant, etc. In the bridge at Rouen, however, this feature was omitted.

It will be observed that this is the most favorable solution of the problem of crossing maritime channels.

The latitude it leaves for fixing dimensions—height or length—without any unreasonable increase in its cost permits its use over many rivers and inlets requiring easy communications from shore to shore.

It affords greater speed and more regularity than a boat, allowing twice or three times as many crossings to be made as with the latter, without being subject to the same causes of interruption.

It does not even momentarily interrupt navigation, nor does it compel the traffic to make laborious ascents as in the ordinary bridge, or an ascent and descent to an unpleasant passage through a tunnel.

It realizes the minimum distance to be crossed, as its course is straight and horizontal; it consumes very little motive power, and this can be supplied by any kind of motor. Lastly, it is economical in construction.

LAKE MICHIGAN—WIRELESS TELEGRAPHY.

The report that the Pere Marquette line had given up its plan of using wireless telegraphy in the operation of its steamers between Ludington and Manitowoc denied by W. L. Mercereau, superintendent of the company's steamship line. He says the new system, much like the Marconi system, controlled by the Northwestern Wireless Telephone & Telegraph Co., will be operated shortly between Ludington and Manitowoc, over fifty-six miles of open water.

The system will also be put into operation on the steamers of the company if the cost is not too great, but the crosslake line will be the first to be developed. The new system will probably be in complete operation before the close of the summer. The high elevators which the Pere Marquette company owns at Ludington and Manitowoc will obviate the necessity of the erection of the customary high steel towers and when the system is once in operation the frequent delays unavoidable in sending messages through Chicago will be ended. At present their are times when a message sent by their roundabout route that a car ferry has left Manitowoc for Ludington is received about the time the boat is entering the harbor.

CANAL TO THE COAST.

Lieut. C. W. Raymond, of the United States Board of Engineers on deep waterways, has written to A. R. Smith, Superintendent of the Maritime Association, New York, in connection with transportation from the lakes to foreign ports. He says in part: "If a 21-foot ship canal is constructed from the lakes to the sea in connection with these plans and estimates of the Board of Engineers on deep waterways, it undoubtedly will be necessary for the state of New York

to transfer the Erie canal to the federal government. A ship canal cannot be constructed along the route proposed by our board without interfering with the existing Erie canal. The views of the board were requested by Congress as to the comparative advantages of two channels having depths of 21 and 30 feet respectively. The question whether it is desirable for the United States to construct any deep waterway from the Great Lakes to the Atlantic tidewater was not submitted to the board for consideration and the board has not expressed a direct opinion thereon."

It is understood that the Columbian Iron Works, of Baltimore, Md., have been purchased by a syndicate of moneyed men, headed by a well-known officer on the active list of the Navy, and will soon be prepared for government contracts on the largest scale. The dry dock of the company has been constantly employed since the rehabilitation, and the outlook is said to be excellent for a continuance of work during the remainder of the "flush" times in the country.



THE OVERHEAD FERRY AT ROUEN, FRANCE.

vehicle, instead of being above the rails and wheels as usual, is some 140 or 160 feet below these. It possesses, nevertheless, the speed and regularity of motion which can be obtained on any straight and horizontal railway line, with the advantage that, thanks to its long suspension, this new kind of wagon enjoys a smoother motion than the best railway coaches, without the intervention of springs or other expensive and cumbersome appliances in order to modify the vibrations.

The motion of the frame is obtained, without expending much power, by means of any motor—the kind most suitable to local circumstances—cable driven by steam, water under high pressure, compressed air, gas, or oil, or, better still, by electricity. But in the last case the dynamo, instead of being erected on shore, as the steam engine, is preferably placed on the movable frame, which it carries along with itself by means of a pinion working into the teeth of a rack fixed to the bridge.

Whatever may be the kind of engine employed, it must be able to work backward or forward instantaneously. It may,

THE RIVERS OF SOUTH AMERICA.

In reporting the result of his exploration of these rivers General Rafael Reyes, Minister for Colombia at Paris, said, among other things, the following:

"All the countries of South America can, with the exception of Chile, be placed in communication by means of river navigation—Brazil by means of the Amazon; Bolivia through the Madera and Purus, which is close to the Madre de Dios and the Beni. Peru, also, by the same Amazon, the Javary, the Huallaga, and the Ucayali, going up which the Flimbo is reached, and through it one finds communication with the railroad of Oroya, which was started by the American Meiggs, and which runs to Callao, on the Pacific; to Ecuador by the Astaza and the Napo, and Colombia by the Putumayo and the Yapura or Caqueta. These rivers come into touch with the waters of the river Magdalena, which falls into the sea of the Antilles. It is a matter which should be noted by Americans or others, who may be seeking favorable grounds for the building of a railroad to know that at this point there is a depression, very accentuated, in the mountains which separate the two streams, and which would admit of the construction of such a road.

"Venezuela is linked in this great water-course system by the Negro, on which is built the large town of Manaos, with a population of 40,000 inhabitants. The Negro communicates with the Orinoco by means of the river Cassiquiare, and with the Guianus by the rivers Caraparratuba and Trombetas.

"The sources of the river Tocantin, which flows into the Amazon near the town of Para, are near those of the La Plata or Parana river, in such a way that travelers start-

of the Amazon between the dry and wet seasons is 10 meters."

General Reyes is very well known as an explorer of the Andes and of the Amazon, and is the author of a geographical map which covers the site of his arduous exploration. The official paper of the Paris Geographical Society has published some of his works, and the Encyclopedia Britannica tells of his explorations. The French Geographical Society has nominated him as one of its members.

EASTERN FREIGHTS.

Messrs. Funch, Edye & Co., New York, report the condition of the Eastern freight market as follows:

The prevailing high prices of our cereals operates against any improvement in our freight market and steamers have only been able to obtain grain charters on the basis of 1s. 9d. berth terms to picked ports. Shippers show no disposition to take up tonnage for future loading whilst the present conditions of the grain market exist, and as long as offerings of tonnage for prompt, as well as distant loading, continue excessive, prospects for higher rates are anything but encouraging. There has been some further business done in timber charters, but principally to cover old contracts, and the rates accepted in most instances show a falling off from previous fixtures. Time charter boats at the moment are neglected and general cargo business from the gulf is also effected by the fluctuations in the grain market.

The market for sail tonnage is yielding in consequence of more liberal offerings of tonnage and though rates have not as yet shown any appreciable decline, the prospects for the near future seem to favor shippers.

THE WORLD'S TONNAGE.

The number and tonnage of sail and steam vessels owned by the several maritime powers according to Lloyd's Register is as follows:

FLAG.	Steam Vessels.			Sailing Vessels.	
	No.	Net.	Gross.	No.	Tons.
British { United Kingdom	7,020	7,072,401	11,513,759	1,894	1,727,687
Colonies	910	378,925	635,331	1,014	384,477
America, United States of	*690	594,237	878,564	*2,130	1,156,498
Austro-Hungarian	214	240,808	387,471	56	28,613
Danish	369	210,599	412,273	433	106,738
Dutch	289	307,574	467,209	117	63,068
French	662	542,305	1,052,193	552	298,369
German	1,209	1,344,605	2,159,919	501	490,114
Italian	312	343,020	540,349	864	443,306
Norwegian	806	467,123	764,683	1,574	876,129
Russian	496	292,277	469,496	750	251,405
Spanish	422	416,882	642,231	175	52,549
Swedish	678	260,023	418,550	755	218,722

Vessels under 100 tons gross are not included in this report.
* Excluding vessels trading on the Great Lakes.

ing from Buenos Ayres or from Montevideo can enter by this river, which waters Paraguay, cross by land just a few kilometers, before arriving at the river Tocantin, in the Matto Grosso, descend through this to the Amazon, and visit by communication British Guiana, French Guiana, Dutch Guiana, Venezuela, Colombia, Ecuador, Peru and Bolivia.

"Once arrived at Iquitos, an important town of Peru, on the Amazon river, 5,000 kilometers from the sea, the traveler can take the trans-Atlantic boats, which start each month from that harbor for Liverpool, laden with india rubber, etc.

"The river Amazon is navigable at all seasons in trans-Atlantic steamers for 5,000 kilometers, or 3,000 miles, from Pará to Iquitos. The tributary rivers already mentioned are navigable by river boats, such as those in use upon the Mississippi, over a radius of between 500 and 1,500 kilometers. Thus, we have a river navigation by steam of over 16,000 kilometers, of which 5,000 are fit for trans-Atlantic steamers.

"All the territory watered by these natural canals is covered by forests of rare woods, india-rubber trees, cocoa, etc. The exportations of india rubber during the past year were worth over 100,000,000 francs.

"The Amazon at its mouth from Punta Tijoca to Cap du Nord has a width of 180 miles. Its waters are drinkable up to 120 miles out to sea. Such is the force of its current that it drives the sea back. Among its islands there is one, Marajo, or Joanes, over 100 kilometers in length by 40 kilometers broad. The difference of height on the waters

More particularly do we refer to lumber from the gulf to the river Plate and Brazil, for which quite a number of vessels are offering themselves without finding ready charterers.

Naval store freights are likewise dull, the low rates accepted by steamers depressing the market for sailing ships. The same may be said in regard to case oil vessels to the East, rates for which are barely maintained.

THE recent performance of the German steamship Deutschland when in crossing the Atlantic she maintained a speed of twenty-three and one-half knots an hour is will calculated to open the eyes of our naval architects, and to cause serious apprehension when considered in all its aspects. In case of war with Germany or any foreign nation having boats of the class and speed of the Deutschland our commerce would be entirely at the mercy of our enemies. We have no warship that could overtake the Deutschland if she was to be armed and started on a career of destruction, and she could sweep the seas unmolested and fight or run as it pleased her. It is true we have in process of construction five warships contracted to make twenty-two knots per hour, but even these would not avail against the faster craft. The lesson is one that should not be lost. If we are to build up a merchant marine we must also build merchant marine defenders that can defend. The United States flag must fly over as fast vessels as the world knows. If other nations have ships with the speed of the Deutschland we must have them or we must abandon our attempts to become a maritime power.

SHIPPING AND MARINE JUDICIAL DECISIONS.
(COLLABORATED SPECIALLY FOR THE MARINE RECORD.)

Demurrage.—Where the damage to a ship, received through the negligence of a person chargeable therefor, is repaired in a dock, and at the same time other work is done on the ship to a very considerable amount, which other work was not required at that particular time, the party chargeable must pay the entire demurrage, notwithstanding the other repairs. Simpson's Patent Dry-Dock Co. vs. Atlantic & E. S. S. Co., 108 Fed. Rep. (U. S.) 425.

Marine Insurance—Separate Valuations of Hull and Machinery.—Where the hull and machinery of a steamship are separately valued in a policy of marine insurance, the parts thus separated are to be treated as distinct insurances, to be applied to each part as though each were insured by an independent policy. American S. S. Co., Limited, vs. Indemnity Mut. Marine Ins. Co., Limited, 108 Fed. Rep. (U. S.) 421.

Negligence—Action for Damages—Evidence Considered.—Evidence considered and held to show that a dock company was guilty of negligence in failing to have its dry dock and appliances in suitable condition to receive a large steamer docked for repairs therein, and to render it liable in damages for the injury resulting to the vessel from falling while being docked. Simpson's Patent Dry-Dock Co. vs. Atlantic & E. S. S. Co., 108 Fed. Rep. (U. S.) 425.

Courts—Conflict of Decisions.—Where the highest court of a state has decided that, where insured property is so damaged that the cost of repairing will equal the value when repaired, there is a total loss, within the meaning of a policy, "free of any claim for damages or partial loss." In determining rights under a policy issued in such state to a citizen thereof its courts should follow such decisions, though the supreme court of the United States has adopted a contrary construction. Devitt vs. Providence Washington Ins. Co., 70 N. Y. Supp. 654.

Salvage—Compensation—Basis of Computation.—A percentage, merely as a basis of allowance, is not a proper guide in fixing the amount of an award for salvage services, but the true rule is to make such an allowance as is reasonable, having in view all the circumstances of the service, and such as will afford all the encouragement and stimulus to salvage operations necessary to secure the most effective service. The only proper use of a percentage basis is to furnish a convenient mode for the apportionment on ship, freight and cargo, of the amount which the court otherwise deems reasonable and sufficient. The Coya, 108 Fed. Rep. (U. S.) 413.

Collision—Tow and Anchored Vessel—Insufficient Lookout.—One of three scows in tow of a tug came in collision in the night with a schooner anchored in the neighborhood of Craven Shoal, south of the Narrows, in Lower New York Bay. The night was clear, and the schooner had two bright lights, which could be seen a long distance, but the pilot of the tug did not see them, nor the lights of another schooner anchored near, until within 200 feet. While the evidence was conflicting, the weight of it showed that the schooner was within the west anchorage grounds, and that the tug was to the westward of the channel. Held, that the fault for the collision must be attributed solely to the tug, by reason of her negligence in failing to sooner see the anchored vessels. The Stephen Decatur, 108 Fed. Rep. (U. S.) 446.

Tug and Tow—Mooring of Tow During Storm—Liability of Tug.—A tug, during stormy weather, took her tow to a proper place where she could safely outride the storm, and left her moored to other scows, and in charge of her master. During the storm, the tow although having knowledge of the danger, and ample opportunity, took no measures to extend lines of her own to the breakwater, to which the inner scows were moored, or to assist in strengthening their lines, in consequence of which such lines parted, and she was held liable for resulting injury to the other scows. Held, that there was no ground for placing such liability upon the tug, which was not charged with the duty of seeing that her tow was equipped with proper lines, or that she made proper use of them. The No. 6H, 108 Fed. Rep. (U. S.) 429.

Tow—Collision with Wreck.—Two wrecks were sunk in about mid-channel of a river about 1,600 feet apart. Their positions were known to the captain of a tow, and were marked by buoys, and at night should have been lighted. A tow and tug had passed the wreck safely at night, but a following tow, the wrecks not being properly lighted, ran upon one of them. There was nothing extraordinary in the wind or tide, but the size of the tow had probably something to do with the result, although it was not too large to go with safety sufficiently far to the west of the wreck to escape the danger. Held that, as plaintiffs had full knowledge of the obstructions and their location they should have so regulated the size of the tow and its navigation as to have cleared them, and were liable for the resulting injuries. The Edmund L. Levy, 108 Fed. Rep. (U. S.) 435.

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THE thanks of the MARINE RECORD are due the Department of Marine and Fisheries, for a copy of the "Lights and Fog Signals of the Coasts, Rivers and Lakes of the Dominion of Canada" corrected to the opening of navigation this season.

MR. A. DENNY, one of the members of the firm of Denny Bros., Dumbarton, Scotland, world renowned shipbuilders and builders of Shamrock II, is visiting on this side of the Atlantic, and, as we stated several weeks ago, will if possible call upon lake shipbuilders.

THE MARINE RECORD is indebted to the Maryland Steel Co., Sparrows Point, Md., for the transportation and invitation so generously proffered to attend the launching of the U. S. torpedo boat destroyers, Truxton, Whipple and Worden from the yards on August 15.

THE steam turbine propelled, torpedo boat destroyer, Viper, made a speed of 37 knots, equal to a trifle over 42 statute miles per hour. This is the highest speed ever obtained from anything afloat, however propelled. We may add that the Viper is no longer afloat, though. She foundered last week in the English Channel while going through fleet manoeuvres.

ACCORDING to official reports from the Treasury Department the American Ship Building Co. are the now possessors of quite a respectable fleet of miscellaneous tonnage, even including railroad cat ferries. Why this conceit, or is it deceit, should be perpetrated or propagated we are at a loss to properly explain for even the holder of a bottomry bond, or documents substantiating in effect the claims of respondentia, or hypothecation, is not considered prima facie evidence of ownership. Pere Marquette 17, mentioned in another column of this issue is owned by the Pere Marquette Railroad Co. and not by her builders the American Ship Building Co.

ON account of the Sampson-Schley, or is it chiefly the Sly-Sampson controversy, all of the little incidents relating to the Yanko-Spanko game of hare and hounds, recently indulged in along the South side of Cuba will have to be matineed precluded, it is presumed, by the burlesque Hobson. This too for the peculiarly gratifying edification of Spanish-American war veterans who, picknicked at the ninety day Chickamauga and Chattanooga encampments, awaiting the cessation of hostilities. There is little use in shouldering all the excitement of exploded disciplinary irregularities on to the army when it is considered that the navy is entitled to substantiate its claim to at least a little of the rodomontade.

AMERICAN SHIPPING.

Besides the actual construction of shipping in all its forms, and the consequent emoluments arising therefrom, there is a spirit of national feeling amounting in many cases to actual patriotism engendered in the breasts of those who work and witness the successful completion of portions of a nation's tonnage, let it be mercantile or naval.

From the inception of the idea to construct a realm over which the national banner must float a host of obligations arise. These in their ramifications bear a direct national influence and aspect much greater than is popularly or generally surmised.

The winged messengers of commerce sent broadcast over the oceans carry with them all that the flag implies, hence the main reason for national fleets of armed upholders.

An ex-president of the United States realized the duties of his office in a singularly appropriate manner by recently hoisting the stars and stripes over some acquired ocean tonnage, but it has been left for Kaiser Wilhelm II, Emperor of Germany, to more thoroughly complete the official recognition of merchant shipping, as he did in his congratulatory message to the winner of the blue ribbon of the Atlantic, although she is only a carrier, as distinct from a national or naval craft. We herewith repeat the congratulatory dispatch:

"Bravo Deutschland! An excellent performance heretofore accomplished by no other ship in the world. Honor to her builders! Honor to the oft-proved Vulcan yard! Honor to the crew! May both ship and crew carry their glory worthily over the seas. I rejoice that the ship is named the Deutschland."

We see in the foregoing message of congratulation a striking proof of the German emperor's tribute to shipping. The owners, builders, yard workmen, seamen and the nation as a whole are asked to esteem their unrivalled situation and to bear it worthily, even the ship's name is brought into prominence with due distinction. The emperor clearly perceives that every important keel over which his flag waves is a piece of German territory to be specially cared for. It represents more than the additions and accretions made on land. It means the honors and obligations due to a province having the power to locate itself under any foreign flag, and this can't be done in any other way save by shipping, nor can his country even be personally represented at foreign courts without the aid of shipping, and, in the absence of which there would be little need of such a representation.

While not for a moment advocating so radical an innovation as the mandatory presence of a government dignitary at the launching of even the most important tonnage built for the mercantile marine of the United States, we do insist, with others who have the rehabilitation of our shipping at heart, that some steps be taken tending towards the greater encouragement of our citizens in the upbuilding of an adequate representation on the seas, and, in this direction, much may be assumed from the recent utterances of King William of Germany.

LAKE NAVAL RESERVES.

It all makes for the best interests of the country that the young men and the sprinkling of naval talent located at the more prominent lake ports express a desire to form themselves into a corps of naval reserves.

The latest addition in this direction may be credited to Duluth, Minn., a port situated at the head of the lakes and with just as many pretensions to be considered a sea port as Chicago ever indulged in. The embryonic Deweys, while not yet officially enrolled under the regulations observed by this arm and auxiliary of the Navy, will no doubt be organized before the close of the season and be ready for naval inspection and annual drill next year.

As an indication of how well this feature has progressed on the lakes, judging from the recent official cruise of the several drill ships on Lake Erie, the report is made to the Navy Department by Lieutenant Commander W. Winder, U. S. N., who was assigned to inspect the Ohio and Michigan naval militia, "That the exercises just concluded have shown the great advantage offered by a suitable vessel for the use of the militia. The state of efficiency attained by the Michigan organization especially is to be attributed largely to the use of the Yantic. It is my opinion that the Michigan organization, as it stands, is capable of manning and officering a war vessel in time of need."

The Ohio Naval Reserves, in which are enrolled the Cleveland and Toledo battalions, are not spoken so highly

of, but this is due in a great measure to the lack of opportunity to receive proper instructions and drill. While the Illinois battalion enrolled at Chicago did not participate in the annual inspection, it is understood that it is equally as proficient as that of Michigan.

The formation of these State brigades merits the hearty good will and approval of all right-minded, citizens, and the reason of their being was amply demonstrated during our recent unpleasantness with Spain. In all cases it is necessary to mold the crude material into shape, and there is such a splendid element of possibilities within the ranks of the lake naval reserve battalions that we can confidently look forward to the time when the U. S. naval auxiliary from the lakes will represent the finest body of men ever placed at the service and disposal of any maritime country in time of need.

To this end, we bespeak for the Minnesota naval reserves every possible encouragement and assistance in the preliminary steps necessary to be taken for its formation, after which, the most successful results can be positively assured.

ST. LAWRENCE CANALS.

Even if there is not a clear 14-foot draft in the St. Lawrence system of canals, too much cannot be expected of this artificial waterway. Many years ago two large steel steamers the Mackinaw and Keewenaw, built at the Bay City yards of F. W. Wheeler & Co., were drawn apart and each taken to the St. Lawrence in two sections. At even an earlier date steamers of small size had crossed the Atlantic and came through the canals to the lakes. Anything crossing the Atlantic must be in fairly good ballast trim and 12 to 14 feet simply submerges a propeller in any sized craft to speak of. This argues that a 3,000-ton steamer, built very full and with the general hull dimensions of 256-42-26 feet can be locked through canals 270 feet in length and 45 feet in width, leaving room to work the gates, but there is no chance for her to carry any cargo worth mentioning in so doing. We have consistently stated that these canals require specially built tonnage, equally so and for much the same reasons as the Erie canal does. A flotilla of canal boats will never make economical interlake and Atlantic Ocean carriers, nor can the Erie, Welland or St. Lawrence river canals be likened to the Suez or Manchester canal from a transportation standpoint. In a word, too much is now being expected from the Canadian stretches of canals to the St. Lawrence.

"SOO" CANAL TRAFFIC.

All previous monthly records of Lake Superior commerce through the American and Canadian ship canals at Sault Ste Marie were broken during July.

According to the official report contained in another column of the RECORD it shows that 4,781,072 tons of freight passed these waterways, an increase of over June, the previous banner month, of 261,997 tons.

It is a stupendous showing, indicating the rapid growth of the traffic and the absolute necessity of improved facilities which are projected.

The principal item, of freight are grain, including wheat, 5,854,777 bushels; flour, 1,092,625 barrels; iron ore, 3,351,294 tons; lumber, 183,844,000 feet, board measure.

The freight was carried by a registered tonnage of 4,091,609. The total vessel passages through the canals were 3,211; 14,201 passengers were carried.

WE noted in our issue of July 18th that Minister Murphy, Chief of the Department of Marine and Fisheries, Newfoundland, was engaged in the compilation of a wreck chart showing the location of wrecks for the past forty years, with a view to placing better aids to navigation in those vicinities where wrecks clustered, this being a characteristic of a wreck chart. Since that date the Norwegian steamer Vera, from London for Quebec, in ballast, ran on the rocks near Renew, about 50 yards south of the spot where the ill-fated steamer Delmar went ashore and within sight of the wreck of the steamer Lusitania, also the steamer Acis in the same vicinity. This makes a list of four within a stones throw of each other, and as many more narrow escapes occurring within a very brief period. We can't be sneeringly facetious regarding so grave a loss, with lives hanging in the balance. But, if Minister Murphy has no other alternative he is, in duty bound required to chase a lot of natives to that point and keep them pounding tin cans during spells of thick weather.

LAKE FREIGHTS.

Iron ore charters and freights are just where they have been all season. It appears that too much can't be transported to lower lake ports and the freight rates are immovable; although detention at discharging ports is being experienced.

Coal rates advanced a neat 10 cents this week; Buffalo to Milwaukee-Chicago, as noted in our last report and 60 cents was paid on one cargo, (south branch.) Ohio ports are paying the standing figure of 40 cents with a slight indication of an advance. Lake Superior ports, 35 cents.

Shippers seem content to pay \$2.50 per M feet on lumber from the head of the lakes, preparatory to a 50 cent advance on September 1st.

There is a little more grain out of Chicago but Georgian Bay ports have the call on 1 3/4 cents, as offered to Buffalo. Atlantic tonnage is fairly greedy at Montreal and ready to take anything carried over the Canadian route. In July, last year, Chicago shipped 13,521,310 bushels of corn, and last month only, 2,554,343 bushels of corn were shipped out of that port. Duluth and other grain shipping ports show a falling off compared with last year. While the figures for July are favorable to the shippers, they also show that there cannot be any let up in the movement if last year's total is to be reached. Duluth reports an outlook for the briskest shipments of grain from this on ever recorded, as 100,000,000 bushels will be harvested more than ever before.

ERIE CANAL ENLARGEMENT.

The executive committee of the canal association of Greater New York has just reached an important conclusion in regard to its future work. The committee has been wavering on the question whether the promise of a deep waterway from the lakes to the seaboard entirely under national control did not offer better prospects of prompt attainment than a 1,000-ton barge canal. The cause of the wavering was the publication of the detailed report of the deep waterways commission.

This report has now been thoroughly digested and studied by the committee and it has been formally decided that the interests of New York will be better served by a 1,000-ton barge canal than by the larger project.

MORE SHIPBUILDING CONTRACTS.

The American Ship Building Co. closed contracts this week for the construction of two steel cargo steamers of about 6,500 tons to the order of Henry A. and W.A. Hawgood, Cleveland, for early delivery next spring. This order makes a list of twenty new vessels now in the hands of the American Ship Building Co. with inquiries on hand for other tonnage. Notwithstanding the expression of a couple of months ago that the combined yards would hardly find work enough to keep them going during the winter, there was never a moment when sufficient orders were not in sight to make shipbuilding brisk until well along into next summer.

THAT is a sort of waste of words, though paradoxical act of Congress, which says that "the Commissioner of Navigation, under the direction of the Secretary of the Treasury, shall have general superintendence of the commercial marine and seamen of the United States so far as vessels and seamen are not under existing laws, subject to the supervision of any other officer of the government." Local steamboat inspectors are the men who say whether a fellow is liable to get a loaded or light vessel in trouble, or otherwise, sail or steam, if the former is 700 tons or over. A host of local inspectors nullifies to a great extent the position and duties of the Commissioner of Navigation. A spirit of emulation and a pride of profession, which now appears to be entirely lacking, must by some means be engendered in the mercantile marine, and we look to the heads of the service to bring about such a wished for and vitally necessary result.

THE Supervising Inspector General of the Steamboat Inspection Service must surely be holding over all action in the matter of wreck inquiries until the dreary winter months set in, those concerning loss of life in particular. The Bon Ami, Baltimore and Sagamore cases call aloud from "Fiddler's Green." Let us have an impartial inquiry regarding the causes leading up to the loss of these vessels, their crews, and, or, passengers, also, anent their equipment at last inspection, etc., etc. Blunders are being continually perpetrated, which, through the inaction of the head of the Steamboat Inspection Service are being constantly repeated. Forewarned is forearmed but their is neither warning or arming during a protracted period of somnolency.

A LIGHT-SHIP BURNED.

The schooner Smith & Post, fitted as a light-ship on south-east shoal, Point au Pelee, was burned to the water's edge on Wednesday.

This aid to navigation was fitted up and placed in position July 1 by the Lake Carriers' Association. It will be necessary to observe the utmost caution until some other warning is placed in position.

VESSELS CLASSED.

Vessels classed and rated this week by the American Bureau of Shipping, New York, in the "Record of American and Foreign Shipping," are as follows:

Screw steamer Arapahoe, schooner Frederick W. Day, Schooner Joseph G. Ray, 3-masted schooner Navarino, 3-masted schooner Mary E. Morse, 3-masted schooner, George F. Phillips, British half brig Harry Stewart, British schooner Clarence A. Shafner, British schooner Eliza Mae, British 3-masted schooner J. W. Hutt, British 3-masted schooner Alexandra, British 3-masted schooner Marion Louise, British barkentine St. Croix.

LAKE SUPERIOR LEVELS.

Mr. J. H. Darling, U. S. Assistant Engineer, at Duluth, reports that the mean level of Lake Superior in July, 1901, by the U. S. gauge at Houghton, Mich., was 1.35 feet above Low Water Datum. This is 0.41 ft. higher than for the preceeding month, and this rise is 0.20 ft. greater than the normal, which is 0.21 ft. from June to July. This increased

A CANADIAN LAKE SURVEY.

The hydrographic survey on Lake Huron, which is being conducted by the Marine Department, will be completed this season. The work is under the direction of Mr. Fred. Anderson, on board the steamer Bayfield. The last survey of Lake Huron was made sixty years ago, when the vessels on the inland waters did not draw more than twelve feet. It was done rather hurriedly, and the soundings were neither numerous nor complete. Next season a survey of Lake Superior will be undertaken, if the government will provide a new steamer, the Bayfield being unfitted for such exposed waters. A hydrographic survey of Lake Winnipeg is now proceeding under Mr. Stewart's direction and will also be finished before the close of navigation.

SUN'S AMPLITUDES.

The following approximate amplitudes of the Sun's rising or setting will be given each week in this column during the season of navigation. A second bearing may be taken by compass at sunset, by reversing the east bearing given for the nearest latitude, as the change in declination for a few hours makes but a slight difference in the true bearing of the Sun's setting. The bearing may be taken when the Sun's center is on the horizon, rising or setting. The elements which may be obtained by taking these amplitudes are the quantities known as local attraction, variation and

MONTHLY SHIPBUILDING RETURNS.

TREASURY DEPARTMENT, OFFICE OF THE COMMISSIONER OF NAVIGATION, July 31, 1901.

The Bureau of Navigation reports 112 vessels of 16,120 gross tons were built in the United States and officially numbered during the month of July, 1901, as follows:

	WOOD.				STEEL.				TOTAL.	
	SAIL.		STEAM.		SAIL.		STEAM.		No.	Gross.
	No.	Gross.	No.	Gross.	No.	Gross.	No.	Gross.		
Atlantic and Gulf.....	33	2,161	27	1,366	.....	5	4,751	.....	65	8,278
Pacific.....	4	2,597	6	757	.....	.....	.....	.....	10	3,354
Great Lakes.....	3	107	9	442	.....	2	2,814	.....	14	3,363
Western Rivers.....	6	114	15	968	.....	2	43	.....	23	1,125
Total.....	46	4,979	57	3,533	.....	9	7,608	.....	112	16,120

The largest steel steam vessels included in these figures are: Arapahoe, 3378 gross tons, built at Philadelphia, Pa., Owned by Clyde S. S. Co. Pere Marquette 17, 2,775 gross tons, built at Cleveland, O., owned by American Ship Building Co.

The foregoing figures do not include craft without motive power of their own. From other sources than construction one vessel of 170 gross tons was added to the merchant fleet, viz: schooner Salvor, Foreign Wreck.

rate in rise is evidently due to the heavy rainfall in the latter part of June, as noted in a previous report. The rainfall at Duluth for July was 4.39 inches, as reported by U. S. Forecast Officer Richardson, this being only 0.67 inch in excess of the normal rainfall.

The stage of water last month was 0.52 ft. higher than in July, 1900, a year ago, and is 0.60 feet higher than the average July stage for a period of 26 years, from 1872 to 1897.

MAILING LETTERS ON THE HIGH SEAS.

The following official notice has been received by the Canadian Postoffice Department:

All persons on board British ships on the high seas are entitled to send their letters prepaid by means of British stamps. Such letters should be handed to the master or any officer he may appoint to receive them, and should be prepaid at the following rates: 1d. the half-ounce, if addressed to the United Kingdom or any British colony or possession (except the Commonwealth of Australia, Rhodesia, and the Bechuanaland Protectorate); 2 1/2d. the half-ounce if addressed to a foreign country or to one of the three British possessions mentioned above.

The officers dealing with the letters should tie them in a bundle, distinctly labelled—"Posted on board the British ship ——— on the high seas"—and on arrival at a foreign or colonial port this bundle should not be posted in the ordinary way, but should be handed over the counter of a postoffice; if possible, the head office.

Letters written in foreign or colonial waters (as for instance, in Canadian waters) should be prepaid by means of local stamps at local rates, and should be posted in the ordinary manner.

deviation, or the total difference between compass and true, or geographical bearings.

LAKE ERIE AND S. END LAKE MICHIGAN, LAT. 42° N.

Date. Amplitude. Bearing P'ts. Bearing Comp.

Aug. 9....E. 22° N. = N. 6 E. = E. N. E.

Aug. 13....E. 20° N. = N. 6 1/4 E. = E. by N. 3/4 N.

Aug. 16....E. 19° N. = N. 6 1/4 E. = E. by N. 3/4 N.

LAKE ONTARIO, S. END HURON AND CENTRAL PORTION LAKE MICHIGAN, LAT. 44° N.

Date. Amplitude. Bearing P'ts. Bearing Comp.

Aug. 9....E. 23° N. = N. 6 E. = E. N. E.

Aug. 13....E. 21° N. = N. 6 1/4 E. = E. by N. 3/4 N.

Aug. 16....E. 20° N. = N. 6 1/4 E. = E. by N. 3/4 N.

N. END LAKES HURON AND MICHIGAN, LAT. 46° N.

Date. Amplitude. Bearing P'ts. Bearing Comp.

Aug. 9....E. 23° N. = N. 6 E. = E. N. E.

Aug. 13....E. 22° N. = N. 6 1/4 E. = E. by N. 3/4 N.

Aug. 16....E. 20° N. = N. 6 1/4 E. = E. by N. 3/4 N.

LAKE SUPERIOR, LAT. 48° N.

Date. Amplitude. Bearing P'ts. Bearing Comp.

Aug. 9....E. 24° N. = N. 5 7/8 E. = N. E. by E. 7/8 E.

Aug. 13....E. 23° N. = N. 6 E. = E. N. E.

Aug. 16....E. 21° N. = 6 1/4 E. = E. by N. 7/8 N.

With a compass correct magnetic, the difference between the observed and true bearing or amplitude will be the variation for the locality. Should there be any deviation on the course the vessel is heading at the time of taking the bearing, the difference between the observed and the true amplitude after the variation is applied will be the amount of deviation on that course. If the correct magnetic bearing is to the right of the compass bearing, the deviation is easterly, if to the left, the deviation is westerly.



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from 80 to 365 days and nights
without attention, and can be seen
a distance of six miles.

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160 Broadway, New York City.

STATISTICAL REPORT OF LAKE COMMERCE.

THROUGH CANALS AT SAULT STE. MARIE, MICHIGAN AND
ONTARIO, FOR THE MONTH OF JULY, 1901.

EAST BOUND.			
Articles.	U. S. Canal.	Canadian Canal.	Total.
Copper, net tons.....	12,319	1,542	13,861
Grain, bushels.....	1,582,655	58,170	1,640,825
Building stone, net tons...	4,786	.....	4,786
Flour, barrels.....	916,489	1,6136	1,092,625
Iron ore, net tons.....	3,185,575	165,719	3,351,294
Iron, pig, net tons.....	4,070	1,736	5,806
Lumber, M. ft. B. M.....	182,228	1,616	183,844
Silver ore, net tons.....	.....	.....	.....
Wheat, bushels.....	3,695,791	518,161	4,213,952
Genl. Mdse., net tons.....	5,153	2,204	7,357
Passengers, number.....	3,725	3,045	6,770
WEST BOUND.			
Coal, hard, net tons.....	77,875	.....	77,875
Coal, soft, net tons.....	604,030	53,655	657,685
Flour, barrels.....	.....	.....	.....
Grain, bushels.....	2,000	14,000	16,000
Man'd iron, net tons.....	14,399	70	14,469
Salt, barrels.....	42,223	1,685	43,908
Genl. Mdse., net tons.....	53,947	12,265	66,212
Passengers, number.....	4,401	3,030	7,431
Freight:			
East bound, net tons.....	3,747,832	210,137	3,957,969
West bound, net tons.....	756,616	66,487	823,103
Total freight, net tons.....	4,504,448	276,624	4,781,072
Vessel passages, number..	2,644	567	3,211
Reg'd tonnage, net tons...	3,783,585	308,024	4,091,609

Compiled at St. Mary's Falls Canal, Michigan, under direction of Lieutenant-Colonel G. J. Lydecker, Corps of Engineers, U. S. A. Joseph Rip'ey, Assistant Engineer and General Superintendent.

THE submarine bell signal for ships and buoys is a winner, according to Boston men who have perfected the apparatus to the useful stage. The first buoy to be equipped will be placed at the mouth of the St. Lawrence river for the Dominion Coal Co., to warn its colliers of the many dangers. It is claimed, after experiments made in Boston harbor that a bell's tones can be recognized ten miles from the buoy to which it is attached, and as the danger signals will be rigged to ring out different tones the captain of a ship can tell where he is by listening to the bells through his telephones attached to a receiver that he drops overboard. The bells are to be kept ringing by a wire attached to a dynamo on shore. This bell buoy beats the automatic bell signal patented some years ago, and which General B. F. Butler had a tussle to get congress to adopt for the coast service. The surface bell buoy still does duty along the coast in places, but its warnings cannot be heard in severe weather far enough to keep vessels off the danger places it marks. Weather does not affect the new bell's warnings, the inventor's claim.

THE typical Mississippi River steamer illustrated in this issue has her houses and decks covered with H. W. Johns' asbestos roofing.

NOTICE TO MARINERS.

LIGHT-HOUSE ESTABLISHMENT,
OFFICE OF THE LIGHT-HOUSE INSPECTOR, 11TH DISTRICT,
DETROIT, MICH., Aug 5, 1901.

ST. CLAIR RIVER, MICH.—Notice is hereby given that the 13-foot shoal near midchannel and to the westward of the center of Squirrel Island, St. Clair river, Mich., having been dredged away, Squirrel Shoal Red Spar Buoy No. 4, which formerly marked the western edge of the northern end of this shoal, has been discontinued.

ST. CLAIR RIVER, MICH.—Notice is hereby given that the piles recently driven to mark the remains of the crib on the shoal at the head of Russell Island, St. Clair river, Mich., have been carried away and the position of this crib is now marked by a red and white horizontal striped buoy moored close to the northerly edge of the crib in 13 feet of water.

The crib has but 8 feet of water over it and vessels are warned of the danger of passing over this shoal between the red and black horizontal striped buoy on the extreme north edge of the shoal and the red and white horizontal striped buoy which marks the position of the crib.

By order of the Light-House Board:

J. C. WILSON, Commander, U. S. N.,
Inspector 11th District.

feet to the southeastward and the fog-signal house about 130 feet to the northward of the tower.

The approximate geographical position of the new tower, as plotted on Chart No. 1 of Apostle Islands, of the United States Survey of the Northern and Northwestern Lakes, is: Latitude, North, 47° 04' (46"). Longitude, West, 90° 43' (43").

On the same date the present temporary fixed red light of the fourth order, in the wooden skeleton tower, will be discontinued.

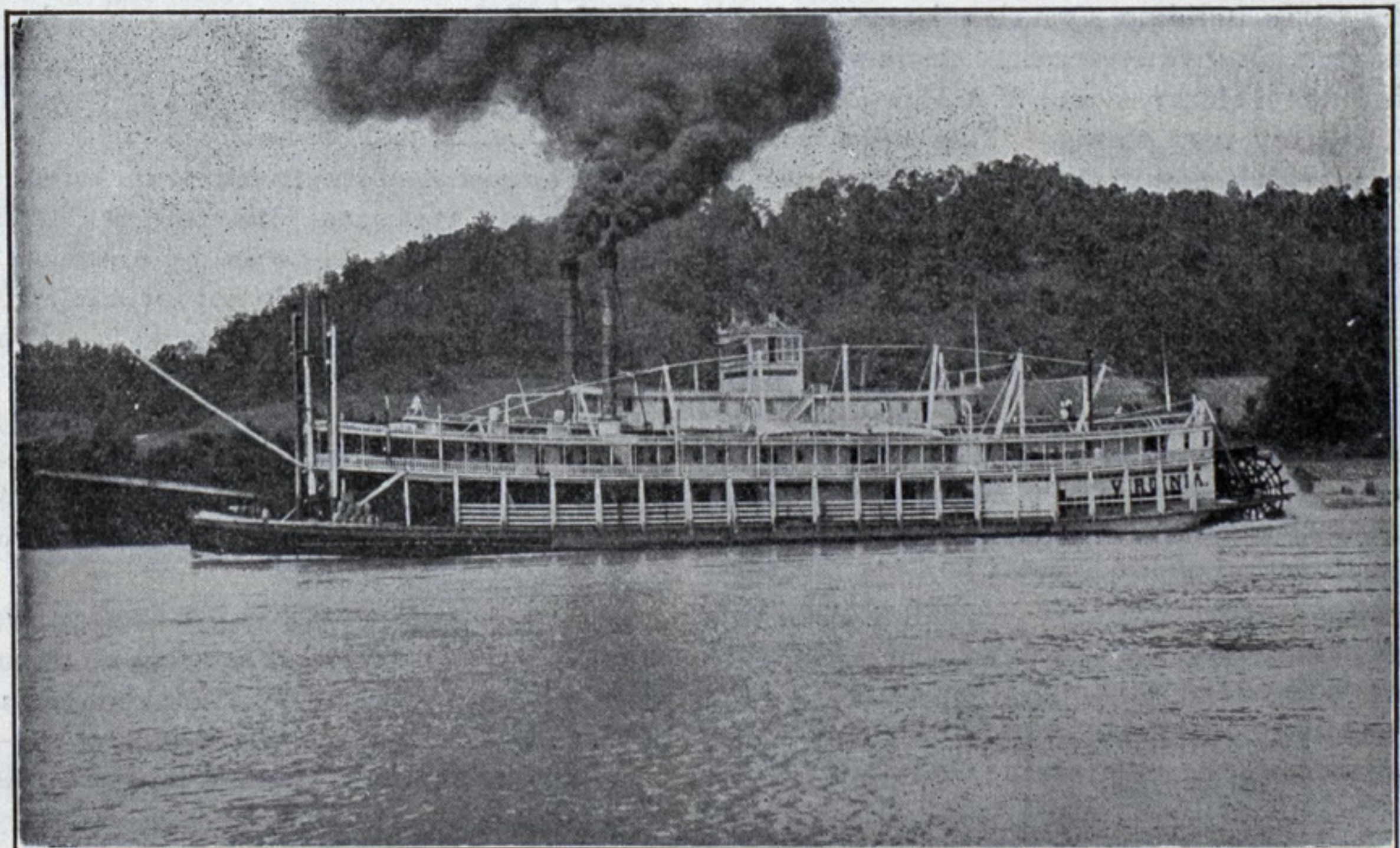
By order of the Light-House Board:

N. H. FARQUHAR,
Rear-Admiral, U. S. Navy, Chairman.

DOMINION OF CANADA.—ONTARIO.

SOUTHEAST SHOAL LIGHT-SHIP.—A light-ship, established and maintained by the Lake Carriers' Association, has been moored in 38 feet water, one mile southeastwardly from the southern extremity of the Southeast shoal, Pelee passage, Lake Erie. Lat. N. 41° 49' 21". Long. W. 82° 27' 10".

The light-ship is a schooner-rigged vessel, with the hull painted red, and "Southeast shoal light-ship" on the sides in white letters.



TYPICAL MISSISSIPPI RIVER STEAMER.

UNITED STATES OF AMERICA—NORTHERN LAKES AND RIVERS—
WISCONSIN.

TREASURY DEPARTMENT,
OFFICE OF THE LIGHT-HOUSE BOARD,
Washington, D. C., August 1, 1901.

DEVILS ISLAND LIGHT STATION.—Notice is hereby given that, on or about August 15, 1901, a light of the third order, flashing alternately red and white, interval between flashes 10 seconds, will be established in the structure recently erected at this station, at a point 200 feet north and 325 feet west of the present wooden skeleton tower. The station is located on the northerly end of Devils Island, the most northerly of the Apostle Islands, south-westerly part of Lake Superior.

The focal plane of the light will be 100 feet above mean lake level, and the light should be seen about 19 statute miles in clear weather, the observer's eye 15 feet above the level of the lake.

The structure is a brown, cylindrical, steel tower, surmounted by a cylindrical watchroom of larger diameter, and a black lantern. The keeper's dwelling is about 350

Two lights, 10 feet apart vertically, are shown from corrugated glass lanterns hoisted between the masts. The upper light is red, elevated 70 feet above the water, the lower being white.

During thick or foggy weather a steam whistle situated in the fore part of the ship will give blasts of 20 seconds' duration, with intervals of one minute and forty seconds between them.

From the ship the following angles were taken: South tangent Pelee island, 0° 0'. Pelee island light-house 35° 30'. Dummy pier 50° 53'.

F. GOURDEAU,

Deputy Minister of Marine and Fisheries.

Department of Marine and Fisheries,
Ottawa, Canada, 22d July, 1901.

All bearings, unless otherwise noted, are magnetic and are given from seaward, miles are nautical miles, heights are above high water, and all depths are at mean low water.

Pilots, masters or others interested are earnestly requested to send information of dangers, changes in aids to navigation, notices of new shoals or channels, errors in publications, or any other facts affecting the navigation of Canadian waters to the Chief Engineer, Department of Marine and Fisheries, Ottawa, Canada.

CORRESPONDENCE.

We do not hold ourselves responsible in any way for the views or opinions expressed by our correspondents. It is our desire that all sides of any question affecting the interests or welfare of the lake marine should be fairly represented in THE MARINE RECORD.

A BODY RECOVERED.

LONG POINT, ONT., August 1, 1901.

To the Editor of the Marine Record:

I found the body of a man 8 or 9 miles up the South beach here yesterday, and it was beyond identification, buried it today. Although it seemed lately to have washed ashore it had evidently been in the water a long time. The flesh was off the face and arms, and mostly off the legs and below the elbows. The left foot was gone. (I mention this that you may better understand the length of time it has been in the water). The body was about 5 feet 8 or 9 inches tall, and had a moderately heavy No. 8 laced shoe on the remaining foot: Black woolen socks, white around the tops, drawers of a reddish tint. Had lost two upper teeth on the right side and one on the left, also an under tooth on the right side.

Yours truly,
S. B. COOK, Light-House Keeper.

SALVAGE—MERCHANDISE—EQUIPMENT.

EAST TAWAS, Aug. 2d, 1901.

To the Editor of the Marine Record:

I wish you would publish custom or law regarding salvage on wreckage after boat goes to pieces. If parties pick up yawls or other property and save it, what share are they entitled to? Such an item will be of interest.

H. C. BRISTOL, Marine Reporter.

We quote the following clauses from "Customs Regulations:"

All merchandise picked up at sea derelict, or recovered from abandoned wrecks, will be taken possession of in the port or district where it shall first arrive, and be retained in the custody of the collector as unclaimed. If not claimed and entered by the owner on due proof of ownership, by the underwriters in case of abandonment to them, or by the salvors in the absence of adverse claims, it will be subject to sale for duties in the usual manner. Salvors have an uncertain interest in the goods saved, dependent upon the decree of a competent tribunal, and also have a presumptive right to possession of merchandise saved by them from abandoned wrecks. The collector will therefore permit salvors to make entry of derelict or wrecked goods in either contingency. If the merchandise be libeled for salvage, the collector will notify the district attorney of the claims of the United States for duties, and will intervene for the same. When such goods are brought into port by lighters or other craft, each such vessel must make entry by manifest of her cargo.

No part of an American vessel, nor any of her equipments, wrecked either in our own or foreign waters, are to be regarded as "goods, wares, or merchandise" when returned to the person or persons owning the vessel at the time of the wreck, and on proper proof of identification. If, however, they have changed ownership, they are to be regarded as merchandise.

(We may also state that it is sometimes an expense to be a salvor. As for instance: A ship's boat picked up in the China seas, taken aboard after considerable work and slight detention to vessel, placed in the charge of port officer at Hong Kong, and after due process conformed with, the salvor is requested to remit excess charges for storage, disposal of property, etc. Ed.)

QUESTION OF IDENTIFICATION.

EAST TAWAS, MICH., August 4, 1901.

To the Editor of the Marine Record:

H. C. Bristol, marine reporter here, has received a letter as follows: "The man described is my son. You say Mrs. Owen can be found in Buffalo, that she took ring and all articles; I do not believe that her husband ever had that ring for it was my son's ring. He was found and her husband was never found; there must have been two Edward Owens on the Baltimore." The above is a quotation from a letter from D. M. Owen, Fair Grove, Tuscola Co., Mich. Mr. Bristol also received a letter from Thos. Murphy, engineer of the Baltimore, stating he had received a letter from Edward Owen, Nanty Gamar, Glendudno, (probably Llandudno,) North Wales, who claims to be the father of Edward Owen. The body of Edward Owen was picked up within about seven or eight miles of the residence of D. M. Owen. As there was only one Edward Owen lost off the Baltimore, the query is which is Edward's father? The body of Edward Owen is buried here. A body was picked up off Sand Beach on Aug. 2nd and from the description of clothing corresponds with fireman off Baltimore. This leaves but one body not recovered, that of the boy, assistant steward, John Dilgren, of Fairport Harbor, Ohio. A large piece of the side of the Baltimore has been found about 400 feet southwest of the wreck and covered by about three feet of water, as it is dangerous to boats drawing less than 14 feet of water, I have arranged with keeper of light on the wreck, Fred Spencer to place a soldier buoy, but this will not show by night.

SEAMEN REFUSING TO PROCEED.

CHICAGO, August 5, 1901.

To the Editor of the Marine Record:

In the case of seamen refusing, from any trivial reason, or without proper cause, to proceed on a foreign voyage after signing articles before a deputy collector of customs, what steps may be taken against them, if any?

INQUIRER.

There are two clauses of the Revised Statutes apparently applicable in such a case from which we quote as follows:

Sec. 4522. If any such seaman shall neglect to render himself on board the vessel, for which he has shipped, at the time mentioned, and if the master of the vessel shall, on the day on which such neglect happened, make an entry in the log-book of such vessel, of the name of such seamen, and shall in like manner note the time that he so neglected to render himself, after the time appointed, every such seaman shall forfeit for every hour which he shall so neglect to render himself, one day's pay, according to the rate of wages agreed upon, to be deducted out of his wages. If any such seaman shall wholly neglect to render himself on board of such vessel, or having rendered himself on board, shall afterward desert and escape, so that the vessel proceed to sea without him, he shall be liable to pay to the master, owner or consignee of the vessel a sum equal to that paid to him by advance at the time of signing the contract, over and besides the sum so advanced, both which sums shall be recoverable in any court, or before any justice of any State, city, town or county within the United States, which, by the laws thereof have cognizance of debts of equal value, against such seaman or mariner, or his surety or sureties, in case he shall have given surety to proceed [on] the voyage.

Sec. 4596. Whenever any seaman who has been lawfully engaged commits any of the following offences, he shall be punishable as follows;

1st. For desertion, by imprisonment for not more than three months, and by forfeiture of all or any part of the clothes or effects he leaves on board, and of all or any part of the wages or emoluments he has then earned.

2nd. For neglecting and refusing, without reasonable cause, to join his vessel, or to proceed to sea in his vessel, or for absence without leave at any time within twenty-four hours of the vessel sailing from any port, either at the commencement or during the progress of any voyage; or for absence at any time without leave, and without sufficient reason, from his vessel, or from his duty, not amounting to desertion, or not treated as such by the master; by imprisonment for not more than one month, and also, at the discretion of the court, by forfeiture of his wages, of not more than two day's pay, and, for every twenty-four hours of absence, either a sum not exceeding six day's pay, or any expenses which have been properly incurred in hiring a substitute.

STATEMENT OF THE VISIBLE SUPPLY OF GRAIN.

As compiled by George F. Stone, Secretary Chicago Board of Trade, August 3rd, 1901.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY Bushels.
Buffalo.....	1,107,000	298,000	344,000	51,000	64,000
Chicago.....	3,843,000	6,967,000	741,000	142,000	1,000
Detroit.....	314,000	49,000	15,000	26,000	3,000
Duluth.....	1,774,000	1,732,000	601,000	93,000	42,000
Fort William, Ont....	658,000				
Milwaukee.....	259,000	617,000	48,000	10,000	16,000
Port Arthur, Ont....	85,000				
Toledo.....	377,000	504,000	111,000	120,000	2,000
Toronto.....	33,000		1,000		
On Canals.....	191,000	63,000	214,000	4,000	
On Lakes.....	889,000	160,000	150,000	25,000	
On Miss. River.....	20,000				
Grand Total.....	30,369,000	12,624,000	4,354,000	656,000	313,000
Corresponding Date, 1900.....	47,594,000	12,320,000	5,585,000	620,000	392,000
Increase for week.....	1,105,000			98,000	5,000
Decrease " ".....		783,000	1,313,000		

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.

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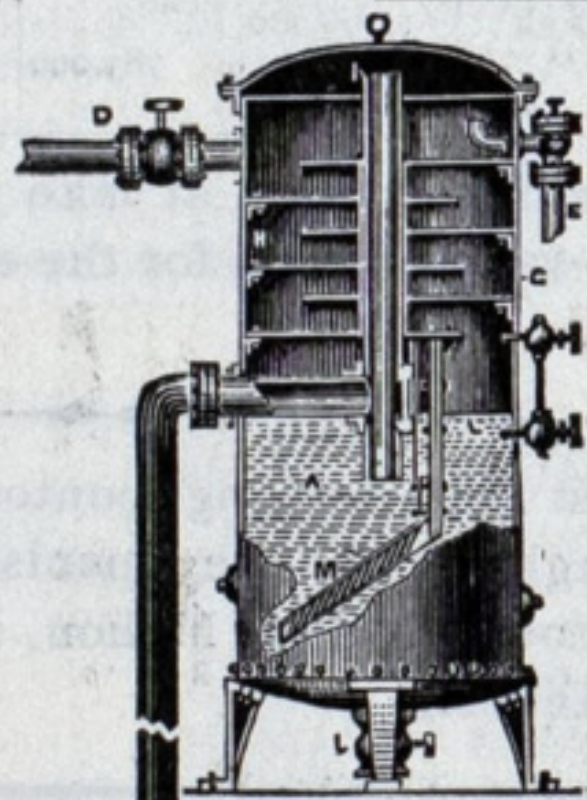
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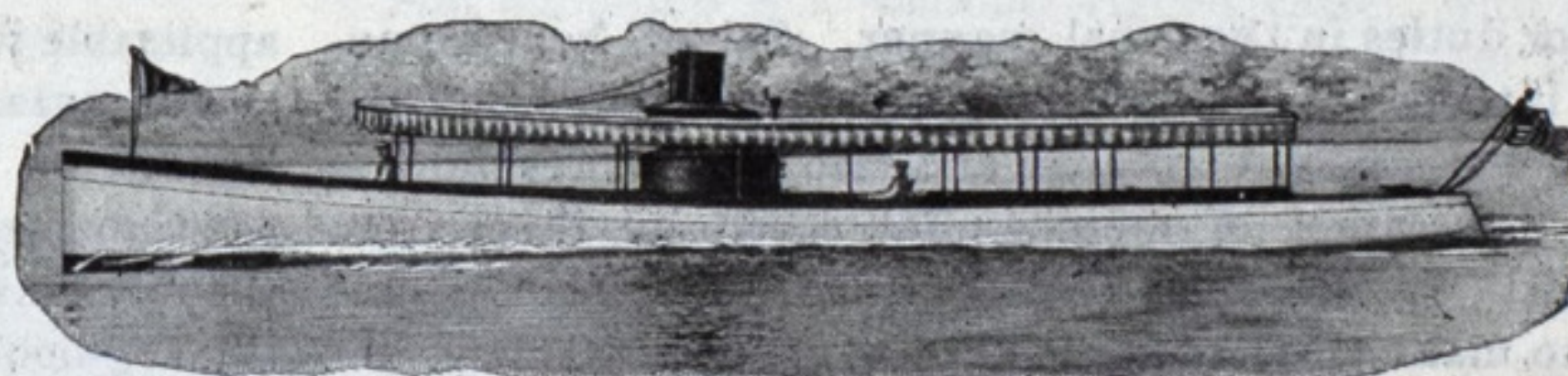
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THE LARGEST CRAFT AFLOAT.

The steamer Celtic, owned by the White Star line, Liverpool, is the first vessel yet constructed to exceed 20,000 tons. Measuring 700 feet in length, with a beam of 75 feet, and a depth of 49 feet, her gross tonnage works out at 20,880 tons, and the net tonnage 13,650 tons. Perhaps the truest measure of the vessel's greatness is, however, expressed in the fact that she displaces at a load draught of 36 feet 6 inches, no less than 37,700 tons, or 10,300 tons more than the displacement of the Great Eastern, and more than double that of the largest battleship afloat. As to her construction the shell plates, of which there are 1,392, averaged 30 feet by 5 feet, were 1¼ inches thick, and in some cases weighed as much as four tons. As in the case of the Oceanic, machine riveting was adopted, wherever possible, in the keel, double bottom, hull and stringers; 167,095 1¼ inch rivets being driven in this way. There are altogether nine decks in the Celtic. With obvious exceptions they are all plated decks and of full length. She is able to feed and sleep double the number of people the biggest hotel on earth can accommodate, for there are quarters for altogether 2,859 passengers, and a crew of 335. The first-class accommodation is on the upper deck, and is the full width of the ship; with the library and the smoking room it forms a very handsome suite. Aft, on the upper and bridge decks, there are quarters for 160 second-class passengers. The dining saloon for this grade is, like that for the first-class, situated on the upper deck; it is comfortably furnished, and looks very handsome in its finish of white and gold. Third-class passengers, to the number of 2,352, are provided for on the upper, middle and lower decks, some in state rooms and others in open berths. The deck crew numbers 64. The engine room and stokehold staff is 92, and there will be 179 stewards to attend to the wants of the passengers.

Though we have given full particulars of the vessel in previous issues of the RECORD, for purpose of comparison we may state that the Oceanic, the second largest steamer afloat, is 705 feet 6 inches long, 68-foot beam, and 49-foot depth, her registered tonnage being 17,274 tons. The Great Eastern, it may be recalled, had a tonnage of 18,915. The Celtic's displacement is nearly double that of the Kaiser Wilhelm der Grosse, and 10,300 tons more than that of the Great Eastern.

FLOTSAM, JETSAM AND LAGAN.

The body of Capt. Joiner of the sunken whaleback barge Sagamore was recovered on Friday last by divers.

Capt. Larrabee, of the steamer Peshtigo, was drowned at Lake Linden, Mich., last week, by falling from the dock while trying to board the steamer.

The bodies of two fishermen, lost off Sheboygan March 18, have just now drifted ashore near that port. This five months submergence of bodies may be considered noteworthy for future reference.

The information has been given out that the Chicago-Hamburg ships are paying no dividends. It is sad, but not surprising. These are good ships of their class, but they are not of the transatlantic class.—Marine Journal, New York.

The old-time word "wreckers" has today completely lost its original meaning and fascination. The wreckers of romance and history lived by plundering wrecks, for which they themselves were responsible as often as not. The wreckers of today live by an honorable calling, for the wrecking of a ship now means the saving of ship and cargo for the benefit of her lawful owners.

Capt. Sylvanus Mott, died at Houghton, Mich., last week, aged eighty-four years. Capt. Mott was born in New York state in 1818, and for forty years was a sailor on the Great

Lakes, going to Portage lake with the tugs Hancock and Houghton in the 60's to do work in connection with opening the canal. For a time he was range light keeper on Portage lake.

The coastwise steamship lines, running out of New York, including the Ward, Clyde, Mallory, Old Dominion, Morgan and Southern Pacific lines, have been notified of the adoption of a new wage schedule by the Marine Engineers' Beneficial association. These figures are an advance over the present scale, but it is said that the steamship owners are disposed to grant the demands of the engineers, though they consider them unjust. This is probably a prelude to the severance of the coast, river and lake marine engineers.

That excellent journal the MARINE RECORD notes the loss of several steamers and a score of other vessels this season on the Canadian route to the ocean, and says it is the most dangerous to shipping in the known world. If the Gothamites get their other eye open and devote a small part of the \$20,000,000,000 wealth of their city in providing a deep waterway from Lake Erie to the Hudson river, they may regain the traffic. All the great country tributary to the Great Lakes is deeply interested in this matter—cheaper transportation.—The Republican, Wauseon, O.

Where there is one accident to a naphtha or gasoline launch there are probably one hundred casualties to other class of vessels and yet when an accident occurs to either of the former, there is one of the greatest fusses made over it by some of the newspapers. There is no more danger of a naphtha or gasoline tank exploding, if proper precaution is at all times exercised, than there is for a kerosene lamp to explode. The whole trouble is people get careless at times and if they do so they must suffer the consequences. Naphtha or gasoline tanks should not be "monkeyed" with any more than steam boilers; keep fire from the former, and sufficient water in the latter and all will go well.—Ex.

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For further particulars see
"Passenger Lines on the Lakes,"
page 18.

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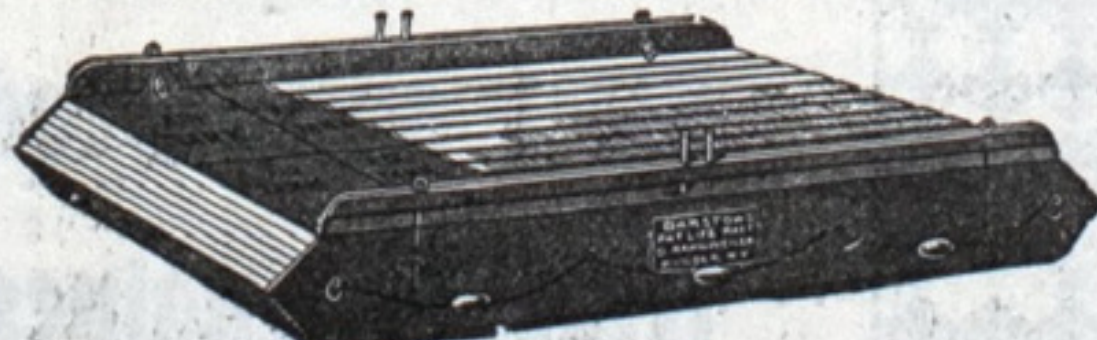
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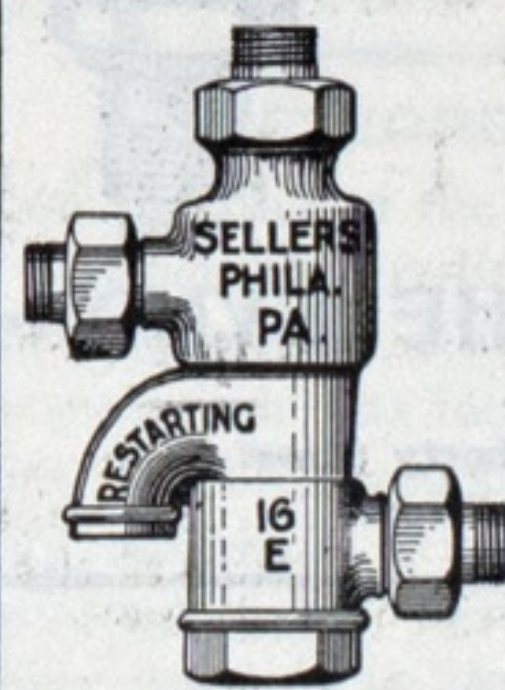
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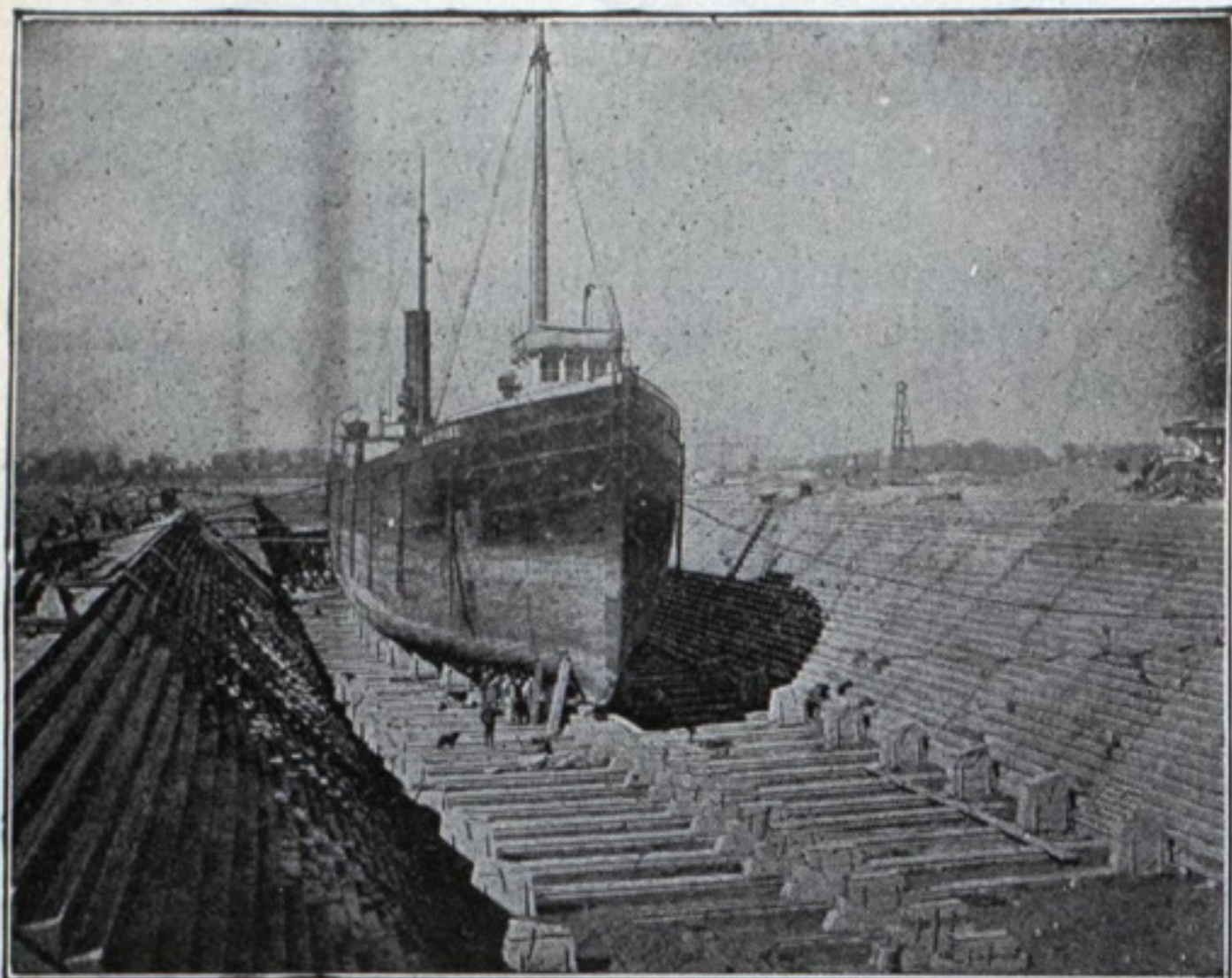
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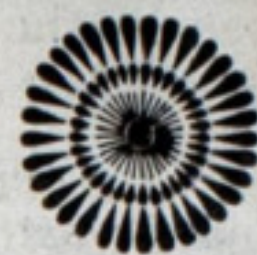
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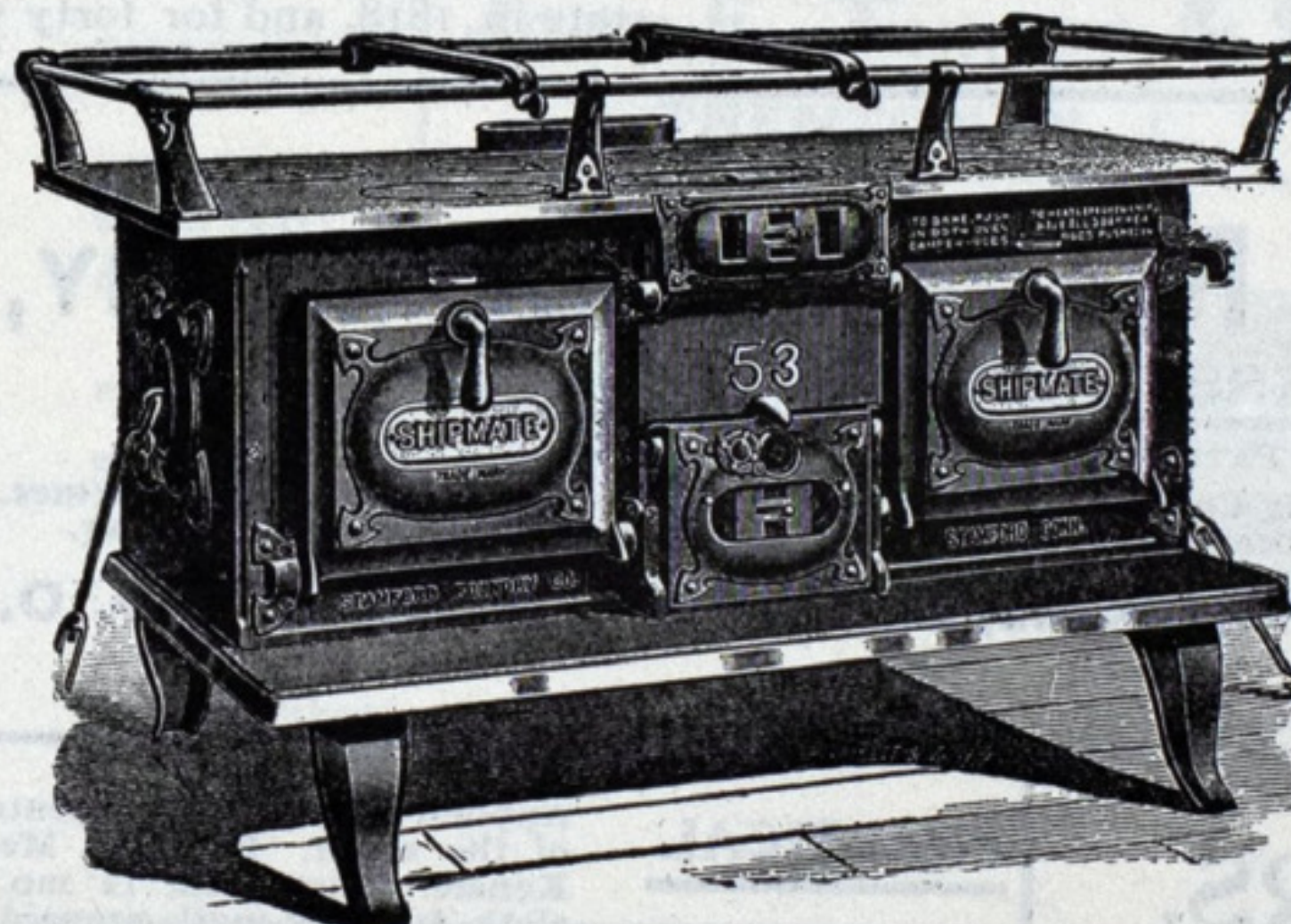
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